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**HOW TO USE PERFORMANCE MEASURES DATA
TO DOCUMENT & IMPROVE OUTCOMES**

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HOW TO USE PERFORMANCE MEASURES DATA TO DOCUMENT & IMPROVE OUTCOMES

- ▶ **Grantee & Award #:** Young Women on the Move (90TS0093)
- ▶ **EBP:** Love Notes 3.0 & 4.0 SRA
- ▶ **Funding Agency:** Family & Youth Services Bureau
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INTRODUCTION

- **Purpose**
 - ✓ Strategies & Approaches
 - ✓ Assess Change At Exit
- **Learning Objectives**
 - ✓ Methods & Techniques
- **Overview**
 - ✓ Study Type & Setting



LEARNING OBJECTIVES



Understand the use of analytic methods & techniques to facilitate analysis of performance measures data.



Interpret & synthesize the results to identify areas where improvement is needed.



Identify approaches for engaging partners in interpretation and to enhance understanding and buy-in.

COMMUNITY CONTEXT

- ▶ USD500 reported low graduation rates (74% vs. 88% statewide) and high poverty rates (>75% receive free or reduced-price meals) (1 & 2).
- ▶ 20% of WYCO adults 25+ (1 in 5) earn a BA/BS vs. 34% in the US (3).
- ▶ 16% of WYCO residents live in poverty vs. 11% in the US (3)
- ▶ 11%-14% of live births statewide (2020-2022) were reported for WYCO females 15-17 years, and 10-12% for females 18-19 years (1).

OVERVIEW

► Implementation Setting: C-SRAE Evaluation

- ✓ Love Notes (LN) SRA (in-school) – 4 Semesters
- ✓ 3,000+ Urban High School Students Consented (Passive)
- ✓ Hispanic Ethnicity 59%-70% | Black 20%-26%
- ✓ Males 50%-55% | Females 43%-49%

PROJECT OBJECTIVES

- ▶ **Support gains in knowledge, skills, & attitudes that value SRA, and personal responsibility & self-sufficiency. Lessons encourage:**
 - Improved decision-making, relationship skills, increased goal-orientation → delay parenting until key markers are met.
- ▶ **Improve the ability of teens & parents to talk about sex.**
- ▶ **Can EB programming reduce the risk for teen pregnancy?**

YOUTH INTENDED OUTCOMES

1

- Improved decision-making skills

2

- Increased communication & self advocacy skills

3

- Greater healthy relationship knowledge & skills

4

- Stronger commitment to goal-oriented behaviors

5

- Decreased risk behaviors & improved SDH

EVALUATION PRESENTATION OBJECTIVES

- ▶ **Describe the methods & techniques** used to support evaluation and analyze survey data (e.g., *t*-Tests, sub-group analyses, & a 90 day F/U).
- ▶ **Examine program outcomes** & identify opportunities for improvement using de-identified data.
 - ✓ **Is their evidence that participant intentions improve after participation?**
- ▶ **Engage partners in interpretation** of the findings to expand understanding and collaboration.

ASSESSING CHANGE AT EXIT

- ▶ Students were asked whether their intentions changed on key items.
- ▶ Original Response Categories :



- ▶ The classroom average change in likelihood (*t*-Tests) were computed to assess change at exit for statistical & practical significance.

ASSESSING CHANGE AT EXIT: RESPONSE RECODING

Exit Survey Items 8-12	Original Value	Recoded Value
Much More Likely	1	+2
Somewhat More Likely	2	+1
About the Same	3	0
Somewhat Less Likely	4	-1
Much Less Likely	5	-2

SINGLE ARM STUDY: SUMMARY

Frequencies

- 4 Semesters
- Few Differences
- One Dataset

Class IDs

- Teacher & Period
- 94 Entry Classes
- 97 Exit Classes

Responses

- t-Tests ran
- No Change=0
- $\alpha = .05$

ASSESSING CHANGE AT EXIT: t-TEST ANALYSES

- ▶ **Participation positively impacted students' intentions across all classrooms, with positive means,** on items related to:
 - ✓ Decision Making (9a-9d) ($p < .001$ & $d = .80$ to $d = 2.31$)
 - ✓ Goal Orientation (10a & 10b) ($p < .001$ & $d = 3.45$ to $d = 3.57$)
 - ✓ Healthy Relationship Knowledge & Skills (11a-11c) ($p < .001$ & $d = 2.70$ to $d = 4.14$).
 - ✓ Principles of The Success Sequence (12a-12f) ($p < .001$ to & $d = 1.16$ to $d = 3.35$).

ASSESSING CHANGE AT EXIT: DECISION MAKING & GOAL ORIENTATION

One Sample T-Test: Classroom Average Change All Semesters

<i>Has participation made you . . .</i>	<i>t (97)</i>	<i>p-Value</i>	<i>Effect Size</i>	<i>Class Mean</i>	<i>SD</i>
9a. Resist peer pressure.	16.00	<.001	1.62	.74	.46
9b. Manage emotions.	19.84	<.001	2.00	.85	.43
9c. Consider consequences.	22.90	<.001	2.31	.95	.41
9d. Talk w/ parent(s) about sex.	7.94	<.001	.80	.40	.50
10a. Make plans to reach goals.	34.17	<.001	3.45	1.20	.35
10b. Do well In school.	35.32	<.001	3.57	1.19	.33

ASSESSING CHANGE AT EXIT: HEALTHY RELATIONSHIP SKILLS

One Sample T-Test: Classroom Average Change All Semesters

Healthy Relationship Skills-	<i>t</i> (97)	<i>p</i> -Value	Effect Size	Class Mean	SD
<i>Has participation made you . . .</i>					
11a. Better grasp healthy relationships.	40.96	<.001	4.14	1.32	.32
11b. Resist or say not to pressure for sex.	29.58	<.001	2.99	1.13	.38
11c. Seek a trusted adult to talk to if uncomfortable or pressured.	26.74	<.001	2.70	1.02	.38

RISK AVOIDANCE & THE SUCCESS SEQUENCE: ASSESSING CHANGE AT EXIT:

One Sample T-Test: Classroom Average Change All Semesters

<i>Has participation made you . . .</i>	<i>t (97)</i>	<i>p-Value</i>	Effect Size	Class Mean	SD
12a. Delay sex until after HS?	18.07	<.001	1.83	.78	.43
12b. Delay sex until after college?	14.89	<.001	1.50	.71	.47
12c. Delay sex until after married?	11.46	<.001	1.16	.57	.49
12d. Delay parenting until married.	23.97	<.001	2.42	.90	.37
12e. Work FT before you get married.	31.55	<.001	3.19	1.13	.35
12f. Work FT before having a child.	33.17	<.001	3.35	1.17	.35

SUB-GROUP ANALYSES AT EXIT: SEMESTER, SCHOOL, GENDER, & SURVEY TYPE

Participation positively impacted students' intentions across schools on all domains ($p < .001$ to $p = .04$ & $d = .42$ to $d = 7.93$) **except for:**

- Attitudes about substance use (8a-8f) (2 schools).
- Intent to talk with parents about sex (9d) (1 school).

Participation significantly impacted students' intentions for English & Spanish test takers ($p < .001$ to $p = .029$ & $d = .33$ to $d = 4.25$) **except for:**

- Alcohol & cigarette use (8a & 8b) (Spanish version).

SUB-GROUP ANALYSES AT EXIT: BY RISK STATUS

- ▶ We also studied the role of risk status at baseline (BL) on outcomes.
- ▶ Classes with low and high percentages of sexual activity & substance use were grouped to assess the impact on intentions.
- ▶ Results showed that classes with **both** low & high-risk values at BL reported significant change in intentions with medium-large effects.

SUB-GROUP ANALYSES AT EXIT: BY RISK STATUS

- ▶ Change in intentions at exit for:
- ▶ Decreased **alcohol use** was strong ($p < .001$ and $d = .61$ to $d = .81$) for classes with low ($\leq 9.9\%$) and high (10.0%-57.1%) BL use.
- ▶ Lower **marijuana use** was strong ($p < .001$ & $d = .79$ to $d = .70$) for classes with low ($\leq 7.4\%$) and high (7.5%-57.1%) BL use.
- ▶ Lower **pain medication use** was strong ($p < .001$ to $p = .001$ & $d = .51$ to $d = .91$) for classes with low ($\leq 5.5\%$) and high (5.6%-28.6%) BL use.
- ▶ Decreased **sexual activity** ($p < .001$ and $d = 1.14$ to $d = 3.68$) for classes with low ($\leq 13.5\%$) & high (13.6%-40.0%) BL use.

CHANGE AT EXIT BY ATTENDANCE LEVEL

- ▶ *The relationship between the classroom average attendance and average intent to change (items 9a-9d, 10a-10b, & 12a-12e) was studied.*
 - ✓ Only the intent to delay sex until marriage was significantly correlated with the classroom average attendance, with $r=.23$, and $p=.025$.
- ▶ On average, classes with higher attendance typically had higher average intention to change.

90 DAY FOLLOW-UP: DEPENDENT SAMPLES *t*-TESTS

- ▶ **Entry survey** responses were collected at baseline & 90 days after participation using **dependent samples *t*-Tests** (2 schools).
- ▶ The mean difference from entry to 90 days after participation showed statistically significant gains with large effect sizes for:
 - ✓ Caring about doing well in school (item 10b) & willingness to ask for help if bullied online (items 10d-10e, student/another person).
 - ✓ Conversely, the mean difference for having talked to a parent or guardian about sex was lower after participation (item 9d).

SATISFACTION

- ▶ The class average for satisfaction items ranged from 1.89 to 2.38, where 1=all of time, 2=most of time, and 3=some of time.
- ▶ No significant differences in satisfaction items was found by semester or site using Analysis of Variance (ANOVA).
- ▶ One school consistently rated higher on: lessons were clear & helped students to learn, & students felt respected & could ask questions.

PARTNER ENGAGEMENT & SUSTAINABILITY

- ▶ Partner engagement included:
 - ✓ Joint planning for sessions.
 - ✓ Debriefings early each semester related to strategizing implementation challenges.
 - ✓ A community satisfaction survey administered annually.
 - ✓ Co-interpretation of the findings.
- ▶ By Year 4, the district purchased their own curriculum to teach in a core class & asked for help with MS programming.

SUMMARY

- ▶ Significant change in intentions at exit was reported across classrooms, by gender, school, semester & survey type with few exceptions.
- ▶ **Regardless of risk at BL, students responded positively to the lessons** and indicated that they were satisfied “most of the time”.
- ▶ The attendance rate was significantly related to intent to delay sex until married.
- ▶ Teachers & district officials were engaged in co-implementation and interpretation of the results; new partnership was formed to serve MS students.

NEXT STEPS

- ▶ **Conduct post-hoc analyses** to adjust for the family wise error rate (e.g., number of tests ran) using Benjimini Hochberg procedure.
- ▶ Analyze & report partner satisfaction survey results.
- ▶ Summarize fidelity observations conducted by staff.

REFERENCES

1. Kansas Department of Health & Environment (2021, October 31). *Pregnancy Statistics KIC*. Kansas Information for Communities. Retrieved April 8, 2024, from http://kic.kdheks.gov/pregnancy_new.php
2. ACEF (n.d.). *Free and Reduced Lunches*. KidsCount Data Center. Retrieved April 8, 2024, from <https://datacenter.aecf.org/data/tables/1277-free-and-reduced-priced-lunch?loc=18&loct=2#detailed/2/any/false/1095,2048,574,1729,871,870,573,869,36,868/any/2761>
3. U.S. Census Bureau (n.d.). *QuickFacts Wyandotte County, Kansas; United States*. Retrieved March 22, 2023, from <https://www.census.gov/quickfacts/fact/table/wyandottecountykansas,US/PST045223#PST045223>

Questions?

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Session Evaluation

Please complete a brief evaluation form for all workshop, forum and networking sessions by scanning the following QR code or visiting the following link:

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