Factors Associated with Adolescents' Mental Health Access and Patterns of Utilization

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Key Issues

- High percentage of unmet mental health need among children and adolescents—even with policies in place.
- Racial/ethnic disparities in mental health service utilization still exists regarding:
  - Unmet need (Kataoka, Zhang, & Wells, 2002)
  - Access to any care (Kodjo & Auinger, 2004)
  - Access to specialty care (Alegria, Canino, Rios, Vera, Calderon, Rusch, & Ortega, 2002)

Background

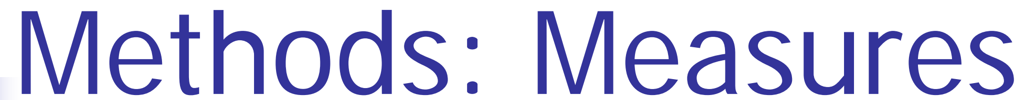
- Individual level factors
  - Severity & type of symptomatology
  - Socio-demographic factors
  - Parent characteristics
- Environmental level factors
  - Location of residency
  - Type and availability of mental health providers.

Purpose of Study

- How many youth access mental health services and location of these services?
- How certain individual and environmental factors affect continuity of services?
- How individual and environmental factors interact, if at all, and affect mental health utilization?

Methods: Data

- Datasets
  - Waves I & II In-Home Questionnaires
  - Parent Questionnaire
  - School Administrator
  - Contextual –Area Resource File etc.
- Complex Sampling Design
  - Sampling Weights (from Wave II)
  - Primary Sampling Unit and Stratification



Methods: Measures

- Type & Severity of Symptomatology
  - Wave I items were dichotomized
    - Internalizing items such as feeling depressed, sad etc.
    - Externalizing items such as stealing more/less than $50, carrying a weapon etc.
  - Categorization: Internal, external, both (most severe), or low to none (least severe)

Methods: Measures continued

- Individual Factors
  - Socio-demographic variables
  - Parent Characteristics (e.g., disability, education, U.S. Born, family structure)
- Environmental Factors
  - Urbanicity
  - Neighborhood Poverty
  - Level & Type of Provider

Methods: Measures continued

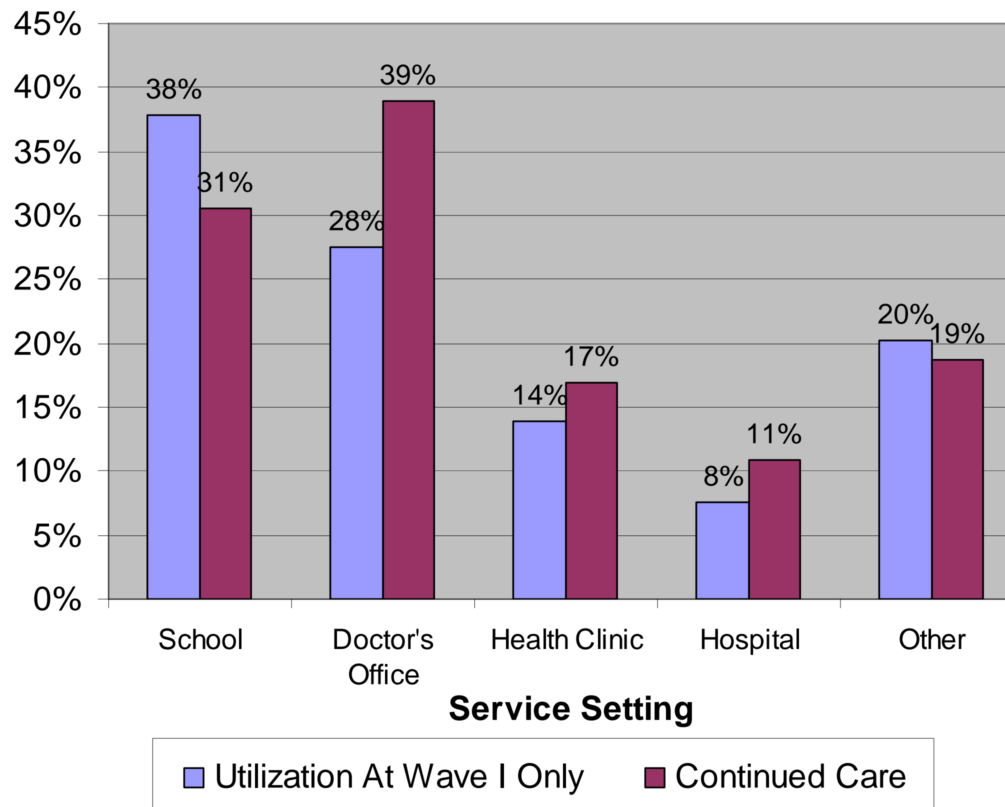
- Pattern of Use
  - Initial: Psychological counseling at Wave I only
  - Continued: Psychological counseling at Wave I & Wave II.
- Service Setting
  - Location of care: school, clinic, hospital, doctor's office, or other.

Results: Once vs. Continued Care

- 7.4% (n = 1090) accessed services one time only at Wave I.
- 4.7% (n = 697) youth accessed services at both times.
- Most youth accessed services either in a school setting or a doctor's office.

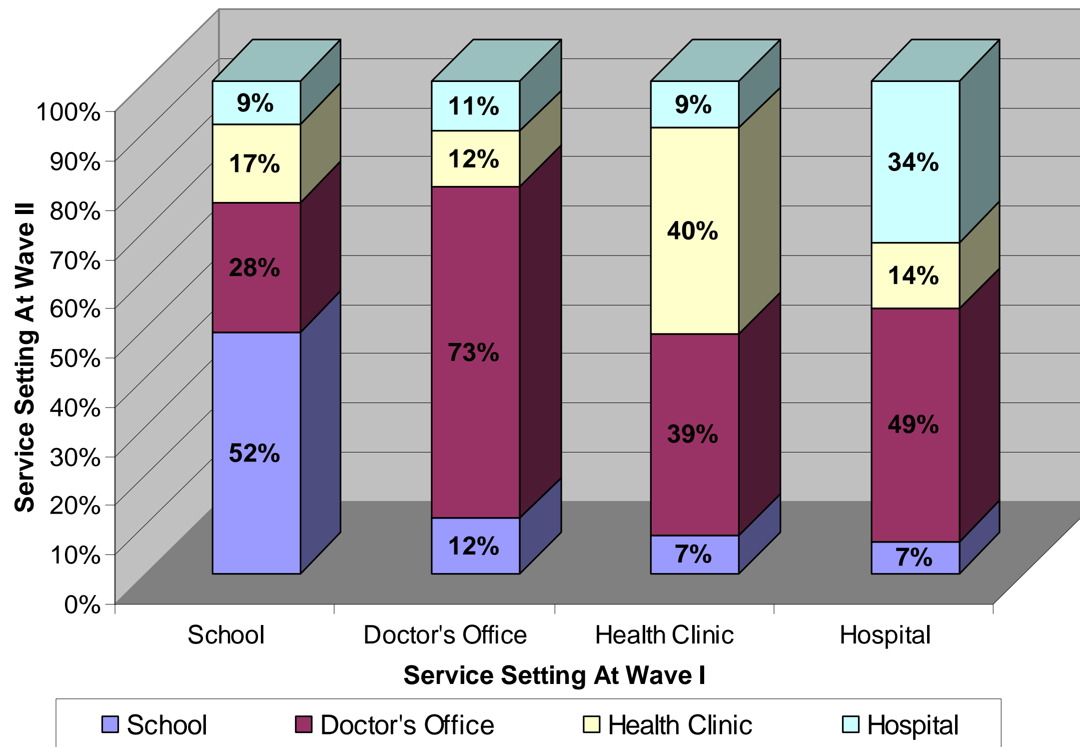
Results-Service Setting

Figure 1: Service Setting At Wave I by Youth Who Obtained Care Once or Multiple Times



Results: Service Setting cont.

Figure 2: Service Setting At Wave I and Wave II by Youth Who Continued Care



Results: Who Obtains Care

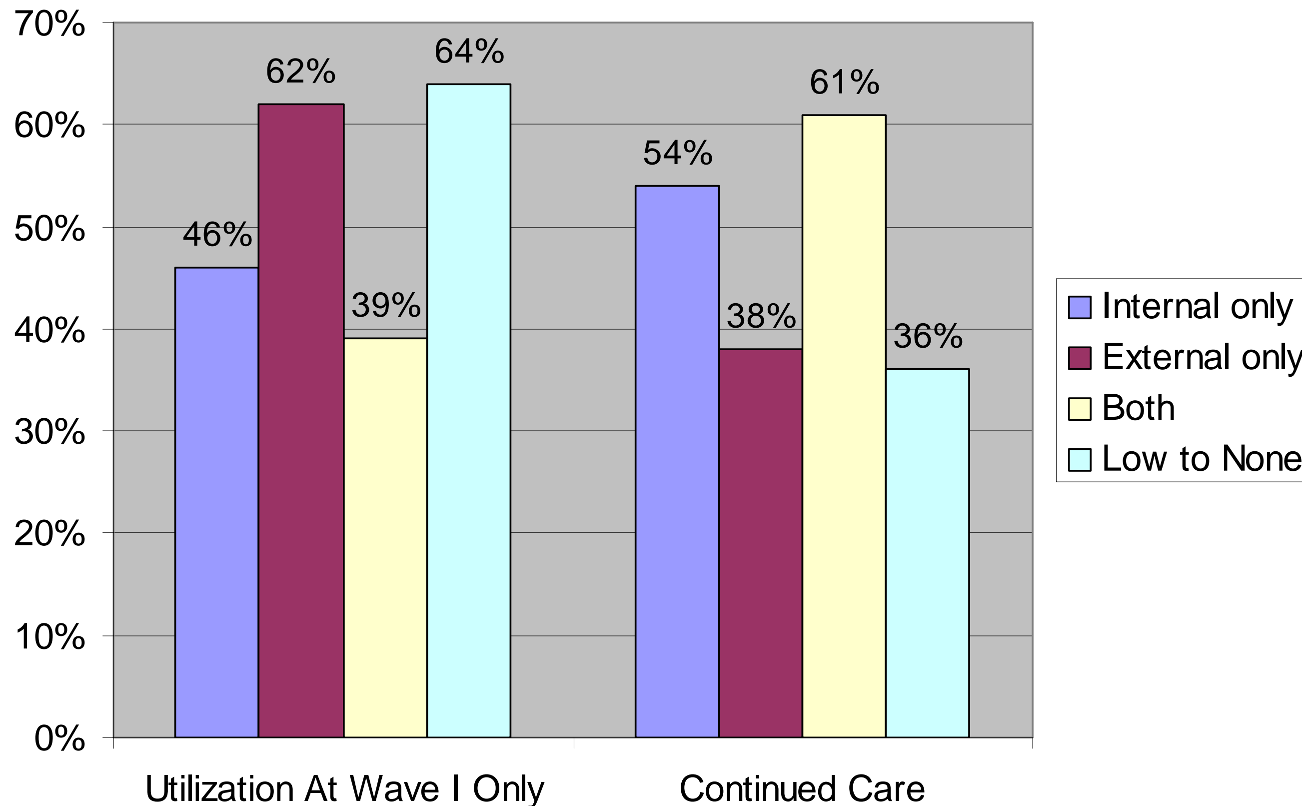
- White non-Hispanic youth.
- Under the age of 16.
- Privately insured.
- Living with both parents.
- Low poverty areas.
- Low to moderate levels of provider availability.
- The parents are:
  - At least high school graduates or with some college.
  - U.S. born
  - Do not have a disability

Results: Differences Between Once vs. Continued Care

- Continued care is obtained by:
  - Fewer African-American/Black (non-Hispanic)
  - More girls than boys
  - More youth who live among high levels of providers such as office based child psychologists.
  - More youth who have higher household incomes

Results: Symptomatology

Figure 3: Level of Symptomatology by Mental Health Utilization Pattern



Result: Likelihood of One Time Care

Table 1: Individual and Environmental Characteristics Regressed On One Time Mental Health Care Use

	One Time Care Model 1 Odds Ratio (CI)	One Time Care Model 2 Odds Ratio (CI)
Internalizing Symptoms (ref. Low/none)	1.87 (1.30-2.68)*	1.87 (1.30-2.68)*
Externalizing Symptoms (ref. Low/none)	1.88 (1.42-2.48)*	1.88 (1.42-2.48)*
Disabled Parent	1.44 (1.11-1.86)*	1.42 (1.10-1.84)*
Single Parent (ref. dual parent)	1.50 (1.19-1.90)*	1.51 (1.19-1.90)*
Urban	1.73 (.98-1.40)	1.20 (1.00-1.43)*
Urbanicity x Severity		.25 (.06-1.01)*
Poor Neighborhood x Severity		1.40 (.30-6.22)
Minority x Severity		2.02 (.36-11.42)
High Level of Providers x Severity		.22(.02-2.23)
Private Insurance x Severity		.56(.15-2.09)

*Significant at a p <=.05

Result: Likelihood of Continued Care

Table 2: Individual and Environmental Characteristics Regressed On Continued Mental Health Care

	Continued Care	Continued Care
	Model 1 Odds Ratio (CI)	Model 2 Odds Ratio (CI)
Male (ref. Female)	.74(.61-.91)*	.74(.61-.91)*
African-American (NH) (ref. all others)	.34(.22-.52)*	.32(.20-.50)*
Internalizing Symptoms Only (ref. Low/none)	4.24(3.05-5.90)*	4.24(3.05-5.90)*
Externalizing Symptoms Only (ref. Low/none)	2.09(1.49-2.92)*	2.09(1.49-2.92)*
Internal & External (Severe) (ref. Low/none)	4.62(2.33-9.15)*	3.46(.77-15.51)
Not Born in the US (ref. US. Born)	.42(.26-.69)*	.42(.26-.69)*
Single Parent (ref. dual parent)	1.68(1.31-2.15)*	1.67(1.30-2.14)*
Public Insurance (Ref. Private Insurance)	1.40(1.02-1.92)*	1.43(1.03-1.97)*
High Poverty Level (ref. low/moderate poverty)	.65(.45-.95)*	.67(.46-.99)*
Urban x Severity		.51(.11-2.38)
Poor Neighborhood x Severity		.40(.09-1.86)
Minority x Severity		3.01(.91-9.96)
High Level of Providers x Severity		1.47(.30-7.23)
Private Insurance x Severity		1.87(.51-6.78)

Summary

- Most youth continue to obtain mental health care in the same service setting they initially enter.
- Continued care is associated with a greater number of individual level factors.
  - More gender and racial disparity
- Severity of symptomatology is a major indicator of whether someone obtains continued care or not and this does not differ:
  - For minorities.
  - Urban area.
  - Level of providers.
  - Private insurance status.

Limitations

- Items in the dataset.
  - Service setting locations vague.
  - Frequency of mental health care is not known within the prior 12 month period, especially at Wave I.
- Cell sizes of certain created (interaction) variables were too small.
- Researcher imposed level of symptomatology which may not reflect actual “illness” but rather an effect of the developmental period.

Conclusion

- Proper assessing and diagnosing of symptomatology especially among this population is essential since level of symptomatology does drive whether care is continued or not.
- Ensuring that youth enter care at an appropriate service setting is also important since most youth end up continuing to obtain care at the same location.

Next Steps

- Conducting a latent class analysis to look at categories of symptomatology.
- Assessing what environmental and individual factors are associated with service setting, especially for those who remain in the same service setting at time one and two.

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