Chapter Seven

Transition to Adulthood

Symposium

Partnerships for Youth Transition: Evaluating the Planning, Implementation, and Progress/outcomes of Community Initiatives

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Symposium Introduction

Hewitt B. "Rusty" Clark

During the transition to adulthood period (ages 14-25), all youth and young adults face decisions about future career and educational goals, new social situations and responsibilities, self-management of behavior and alcohol/drug use, and maintenance of supportive friendships and intimate relationships. Young people with serious emotional disturbances (SED) and severe mental illness (SMI) are particularly challenged during this transition period, experiencing some of the poorest secondary school and postsecondary school outcomes among any disability group. Studies have shown that students with SED/SMI drop out of school at a rate that is about three times higher than their peers without disabilities and that, after exiting secondary school through graduation or dropout, they experience about one-third poorer outcomes in securing jobs, about two-thirds poorer outcomes in living on their own, about two-thirds poorer outcomes in accessing post-secondary education, and have about three times higher rates of arrests and incarcerations than youth without disabilities.

The federal policy response to the legislative and policy vacuum regarding youth transition included funding of the Partnerships for Youth Transition (PYT) initiative by the Substance Abuse and Mental Health Services Administration and Department of Education. Five PYT community sites were funded in 2002 for the purpose of planning, developing, implementing, and documenting models of comprehensive, community-based programs to assist in improving the outcomes for youth and young adults with SED/SMI as they enter the period of emerging adulthood. Three sites have adopted the Transition to Independence Process (TIP) model with its seven principles and associated practice elements in its entirety, and two sites have adopted the TIP model with some various modifications[1].

This symposium provides data on the: (a) processes and instruments used in the planning and implementation of the transition models at the sites; (b) demographic characteristics and experiences; (c) service utilization and satisfaction; and (d) preliminary findings on progress and outcome indicators for the young people. The implementation experiences and findings from across the sites will contribute to the field's instrumentation and knowledge base related to program design, youth and family progress, community partnerships, and system/policy reform.

By means of an assessment instrument that was developed early in the life of the project, an integrated data system was developed and used across all five sites. The National Center on Youth Transition (NCYT) took the lead on working with representatives from all site and national partners in the development of the Transition to Adulthood Assessment Protocol (TAAP) instruments (Davis, Deschênes, Gamache, & Clark, 2004a, 2004b, 2004c). This instrumentation development process drew on an updated literature review, a previous progress tracking instrument (i.e., Clark, Knapp, & Corbett, 1997), and stakeholder focus groups. Some of the data on demographics, service utilization, and progress/outcome on the young people included within each of the following three papers were collected from the TAAP instruments—including the version for capturing historical information on the youth, initial information at the time of his/her entry to the program, and quarterly follow-up on the young person's progress or difficulty during and after involvement with the PYT sites.

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[1] *For more information regarding the TIP model, please visit http://tip.fmhi.usf.edu*

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Utilization of Data from Young People and Other Partners in Implementation of a Transition System

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Introduction

As a Partnership for Youth Transition (PYT) grantee community, Allegheny County System of Care Initiatives (SOCI) has worked with transition-age youth and young adults to inform the overall planning and implementation of a transition system. The goal of the PYT evaluation is to collect, analyse, and disseminate vital information regarding system of care performance and effectiveness in ways that will ensure that the information is used to improve the quality of the service delivery. Hence, data are used to direct change at the program (administrative and direct staff), community, and county levels. This is accomplished through the collaboration of young adults/consumers, community members, families, system partners, and SOCI staff.

There are three evaluation focuses for the PYT project: (a) involving young adults in evaluation, (b) collecting program and outcome data, and (c) collecting information for quality improvement and assurance. The organization of evaluation efforts in these focus areas benefits all stakeholders. The adoption of a utilization-based model of data collection enhances the quality of the program, supports a consumer driven model, and leads to maximum effective use of financial and programmatic resources. This paper addresses how to best maximize partnerships in an evaluation process. It also addresses the question of how evaluation and quality improvement processes and data can be used to inform decision making in a system of care.

Evaluation Methods & Preliminary Results

Participants. Program data collection began with the first referral in March 2004. As of July 2005, 87 young adults have been referred to the program and 43 enrolled. The majority of referrals are from caregivers or are self-referrals from the young adults (58%). The average age of PYT enrollees was 17, with 58% being female. The majority of enrollees were African American (61%) followed by Caucasian (21%). Many of those served (67%) had more than one mental health diagnosis. Currently, the most common diagnoses of PYT enrollees are Major Mood Disorders (63%), Attention Deficit Disorder (37%), and Adjustment Disorders (21%). Other diagnoses include Impulse Disorders, Pervasive Developmental Disorders, Anxiety Disorders, and Drug Abuse and Dependence.

Program Data Collection. In addition to the Transition to Adulthood Assessment Protocol (TAAP; Davis, Deschênes, Gamache, & Clark, 2004a, 2004b, 2004c) assessments described in the introduction to this symposium, SOCI has added measures that assess consumer risk, needs and strengths. These data are collected by program staff. The Consumer Risk Assessment, developed by SOCI staff, is administered when screening an individual for intake into the PYT program. It assesses various risk factors the youth may be facing such as homelessness, multi-system involvement, school dropout, and unemployment. These data help program supervisors with the initial planning phases for a new enrollee and also help to prioritize enrollment when service coordinators are at or near capacity. The Young Adult Needs and Strengths Assessment (Lyons, 2003) collects information on the young adult's needs, strengths and culture and is used for service planning. Data are collected at enrollment and every six months until disenrollment. The Consumer Strengths Discovery instrument is a qualitative tool that asks young adults about their hopes and dreams for the future as well as their general goals for their lives. It is used for service planning and is administered at intake and prior to each consumer support team meeting.

Consistent with the findings of national studies, program data show that in Allegheny County young adults with emotional and behavioral disorders (EBD) are subject to a number of risk factors in their homes and communities. Table 1 illustrates risk factors reported by enrollees (*N* = 43) in the PYT program.

Table 1
Risk Factors

Risk Factors	*Percentages (N = 43)*
Have a Parent with a Mental Illness	56%
Experienced Abuse (Physical and/or Sexual) and/or Neglect	37%
Have Experienced Homelessness	19%
Have Children	19%
Live in Temporary Situations	27%
Dropped Out of High School	29%
Have No Sources of Income	29%
Are Addicted to Drugs and/or Alcohol	9%
Have a Parent Convicted of a Crime	37%
Do Not Have Adequate Transportation to Work/School	33%

Outcome Data Collection. In addition to program data, SOCI has initiated a longitudinal study to collect outcomes data over a two year period with young adults who consent to participate. Data are collected within 30 days of enrollment into PYT and every six months through the end of the grant. The study was designed to collect information similar to that collected under the Substance Abuse and Mental Health Services Administration Center for Mental Health Services system of care grant initiative so comparisons between the younger and older populations could be made. Data in the PYT outcomes study are collected in the following areas: perceptions of opportunities, substance use/abuse, exposure to violence, delinquency, functioning, sexuality, service history, and cultural competency.

Preliminary baseline findings (*N* = 25) indicate a high level of trauma experienced by the young adults being served. Ninety-six percent have witnessed a physical attack on another person; while 44% have been the victim of a physical attack. More than half (56%) report that they had been the victim of emotional or verbal abuse. Twenty-four percent have been the victim of physical abuse and 24% of the females have been raped or experienced an attempted rape. Many (48%) of the young adults report suicide ideation and 28% have attempted suicide.

Quality Improvement Data Collection. SOCI is dedicated to fulfilling its mission and expressing its values through a process of continuous quality improvement (CQI). This process involves the constant monitoring of various aspects of service delivery and outcomes. It is facilitated by the evaluation, operations, family support, community organization, and training and technical assistance staff at the SOCI central office and also by the SOCI partner communities and the SOCI Community Evaluation Team (CET). To monitor fidelity to the SOCI practice model, SOCI staff created several tools to collect information about how SOCI works and whether consumers/families like how it works (see Table 2).

Table 2
Continuous Quality Improvement Tools

Tools	*Description*
Consumer/Family Service/Support Team Satisfaction Survey	Distributed to all participants in a service/support team to gauge their satisfaction with the meeting process.
Initial Meeting Observation Form	Program Supervisors complete this form by observing one initial meeting per service coordination staff per month. Results are used to supervise and coach staff in their interactions with consumers/families. Rates how well staff implements SOCI values.
Team Meeting Observation Form	Program Supervisors complete this form by observing one team meeting per service coordination staff per month (either in person or by videotape). Results are used to supervise and coach staff on how to conduct a team meeting according to the SOCI practice model.
Site Visit / Record / Case Review Tool	Completed annually as part of an annual site visit to all partner communities by the SOCI Central Office. Used to analyze records for documentation, service/support plan implementation and consumer/family program involvement. Also used monthly by Program Supervisors to discuss individual cases with staff.
SOCI CQI Survey	Distributed to all SOCI stakeholders, including consumers and families, annually. Assesses the overall system of care, including how well SOCI is meeting its goals and implementing its values.
Advisory Board Satisfaction Survey	Distributed after each quarterly advisory board meeting in each partner community. Results are used to inform boards what works well for them and where they could make changes.
Community Review/ Site Visit	Annually, each partner community is required to participate in a site visit conducted by a team of central office staff. The site visit is conducted over a two day period and reviews the various components of the SOCI value based service process: operations, family engagement, community outreach and partnership, documentation, and information system management.

Satisfaction with support team meetings has been high among young adults, families and system partners ($N = 63$). Ninety-five percent agreed that the service plan was helping the young adult to become independent. More than half (67%) strongly agreed that the right people attended the team meeting. Eighty percent strongly agreed that the team was a good cultural match and that their input was respected and valued.

Youth Involvement in Evaluation. PYT involves youth in evaluation in several key ways. Young Adults are asked for their opinions through various evaluation methods including surveys and focus groups. These consumers are also represented on the SOCI Community Evaluation Team (CET; a group of stakeholders including youth, families, community members, and system partners that meets once a month to discuss evaluation and quality improvement issues for the system of care). The CET ensures that young adults review outcomes and quality improvement instruments/surveys prior to administering them. Finally, educational opportunities for young adults on evaluation and quality improvement are provided. These trainings include information on how data can be used for practical purposes in their lives such as advocacy activities.

Conclusion

The preliminary data from serving young adults in transition indicates that Allegheny County is serving a population that is multi-system involved. The data also reflect the expected risk factors for this population. Allegheny County has used data collected from young adult consumers to design a system delivery process. This "way of doing business" has a high satisfaction rate among consumers, their family members, and other stakeholders. We have found that applying the expertise of young adults in all aspects of program development and delivery has a significant impact on the quality of decision making.

A number of conclusions and recommendations can be drawn from our experience and preliminary findings:

1. Input from consumers and individuals served can be obtained in a variety of manners and is invaluable
2. Only collect information that is useful. This lessens the burden and intrusion on the consumer and increases their willingness to participate in evaluation.
3. Approach data as a tool to be used by consumers, staff, system partners, and funders.
4. Tie data collection and tools to values and philosophies identified by young adults, family members, and stakeholders. This is an informative and worthwhile process that enriches the data collected.
5. It is best practice to incorporate evaluation into every component of service delivery including, but not limited to: operations, technical assistance and training, social marketing, and information management. In this way, data are an integral part of total quality improvement and have an optimal impact on the lives of young adults.

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Enhancing a Transition System Through Process and Outcome Data: Methodology and Findings

Nancy Koroloff, Lyn Gordon & Michael Pullmann

Introduction

The Clark County, Washington, Department of Community Services & Corrections has established *Options*, a Partnerships for Youth Transition (PYT) project site. The goal of the Options project is to build an enhanced system of treatment to address the particular difficulties that youth with serious emotional disturbance/serious emotional illness (SED/SMI) face in making a successful transition to adulthood. This comprehensive continuum of services is built upon existing programs and works to bridge gaps between the children's mental health system and the adult mental health system.

The program, based upon the Transition to Independence Process (TIP) model, focuses on the life domains of youth that are most critical during the transition years: education, employment, housing, and community life functioning. Program staff include three transition specialists, one job developer, and an employment specialist (or a transition specialist). They work with youth in flexible, innovative, non-clinical ways. Youth are referred to Options from Connections (a specialized mental health program based in juvenile justice) and Catholic Community Services (a provider of crisis and intensive mental health services). Youth qualify if they are age 14-25, meet criteria for a mental health diagnosis, and are at imminent risk of out-of-home placement or homelessness.

As part of Options, researchers at the Regional Research Institute for Human Services, Portland State University, are conducting a process and outcome evaluation. This paper presents preliminary findings from this evaluation.

Process Evaluation

As of March, 2005, 101 youth had been referred to the Options program, and 47 were actively enrolled. Of the remainder, 11 had chosen not to participate or were otherwise not engaged in services. In 19 cases, the transition specialist and youth were still in the process of developing a relationship, and the youth had not yet decided whether to join the program. The rest of the youth had either been closed out of services or were on a wait list.

All 47 of the participating youth had identified goals in the area of Community Life Adjustment. Youth could identify goals in multiple domains, and 26 had articulated goals related to their education. Twenty-seven were interested in obtaining employment, and 11 were looking for independent housing. Of the 47 youth active in Options, all had completed an initial assessment and 40 had completed a success plan. Twenty-two of the youth had also completed the Core Gift process, a series of activities that helps youth determine what their contribution to society will be. Core Gifts is intended to encourage self respect and build hope for the future. Of the 47 youth in the program in March, four were in drug and alcohol treatment, seven were in detention or jail, three were on the run, and four were parenting.

The ongoing process evaluation has yielded many findings that have been helpful in planning for and modifying the program. During the first and second years of the program, focus groups were conducted with youth and caregivers, key stakeholders completed surveys, staff were interviewed, and a system-wide network analysis of most service provider organizations that have contact with transition-age youth was completed. Focus groups with youth in Options were conducted by a university-based researcher and a youth researcher who had experience as a consumer of mental health services. The youth were overwhelmingly positive about the Options program. Key findings suggest that, in general, these youth:

- Greatly appreciated an unconventional, friendly, non-clinical approach,
- Appreciated concrete help with employment and education,
- Felt supported by transition specialists in wraparound team meetings, and
- Did not want their parent to have significant involvement in Options.

Focus groups with caregivers were conducted by a university-based researcher and a family member/researcher. Caregivers were also quite satisfied with the program, having mentioned that Options was successful with their child and could be supportive of them. A few complained they did not have as much involvement in the program as they would have liked. Ongoing process evaluation methods include a quarterly telephone interview with youth to assess their level of involvement and satisfaction with services. Detailed staff activity data are also recorded by the transition specialists. In addition, a brief one-time interview is planned to capture needs as well as satisfaction of family members with the Options program. As soon as six months worth of data are collected, a report will be prepared for the program.

Outcome Evaluation

The Options evaluation is part of a national, five-site evaluation. Transition specialists complete regular youth assessments. A historical/initial Transition to Adulthood Assessment Protocol (TAAP; Davis, Deschênes, Gamache, & Clark, 2004a, 2004b, 2004c) is collected at intake into the program, and quarterly assessments are completed every 90 days thereafter. These assessments collect descriptive information; educational information; employment history and status; financial information; legal history and status; residential history and status; mental health history and status; substance abuse and dependence status; public agency involvement; and satisfaction with services.

Table 1 illustrates the findings for the first 32 youth who completed both the historical/initial assessment and the first 90 day assessment.

This preliminary evidence suggests youth involved in Options show increasing rates of employment and GED completion and a decrease in recent arrests. Current living situation appears to be slightly more stable with no youth homeless for three months. However, four youth were housed in correction settings, possibly the result of adjudication of a crime committed before entering Options. These findings are preliminary and the sample size is small—however, the trends are in a positive direction and are consistent with the data reported by the National Center on Youth Transition.

Table 1
Intake and First Quarter Outcomes for Options Youth (*n*=32)

	Historical/Intake	*3-month follow up*
In school/GED/on hold	24 (75%)	21 (66%)
Graduated/received GED	4 (13%)	7 (22%)
Dropped out	4 (13%)	4 (13%)
Currently employed	3 (9%)	9 (28%)
Arrested during previous 90 days	15 (47%)	10 (31%)
Current living situation		
With family involved in upbringing	21 (66%)	20 (63%)
With spouse/partner	—	2 (6%)
Friend's home—temporary	3 (9%)	1 (3%)
Foster care/group home	2 (6%)	2 (6%)
Substance abuse residential treatment	—	1 (3%)
Corrections setting	1 (3%)	4 (13%)
Homeless	2 (6%)	—
Other/don't know	2 (6%)	—

In summary, Options is a unique program intended to address the needs of transition-age youth. It has promising outcomes—in general, youth and families are satisfied with the program, and youth have increasing success at home, at school, at work, and in the community.

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An Analysis of Partnerships for Youth Transition (PYT) Cross-site Findings: Demographics, Progress, and Outcome Data

Nicole Deschênes, Peter Gamache & Hewitt B. "Rusty" Clark

Introduction

This paper describes how the Transition to Adulthood Assessment Protocol (TAAP; Davis, Deschênes, Gamache, & Clark, 2004a, 2004b, 2004c) battery was developed and is being applied, and provides findings from the preliminary data being analyzed across the five Partnerships for Youth Transition (PYT) sites containing approximately 349 youth and young adults.

Methods

The TAAP instruments were developed such that practitioners, educators, transition facilitators, and others working with a young person would be able to examine the results and use the information for: (a) identifying areas of progress and/or difficulty the young person is experiencing over time; (b) formulating or modifying the services and supports he/she needs in order to achieve his/her current goals; and (c) guiding future person-centered planning to adjust or create new goals with him/her.

To track young people's progress, practitioners and program managers can utilize the growing body of information gathered directly from the instruments over time (e.g., before, during, and after being served by a transition program). By examining the responses to key items illustrating progress and/or difficulty in transition, a pattern emerges over subsequent interviews to illustrate the young person's transition experience. To examine the effectiveness of their program in serving these youth and young adults over time, program managers and other stakeholders can also aggregate the responses across the young people on key items illustrating progress and/or difficulty in transition across the areas listed previously (e.g., prior to entry to the program 68% of young people were employed and/or in school, whereas after the program 92% of these same individuals are now productively engaged).

The TAAP instruments were developed through a process involving the researchers from the National Center on Youth Transition, a researcher from the University of Massachusetts Medical School, and representatives from the PYT community sites and PYT national partners. The creation of TAAP was begun with an extensive literature search and review of existing instruments to assist in the identification of data elements relevant to the adjustment status and community life progress of transition-age young people. The common data elements gleaned from these sources contributed to a focus group process involving PYT site and national partner representatives experienced in work with transition-age young people and their families (e.g., young people, parents, direct service personnel and educators, program managers, and administrators). This process yielded sets of common data elements judged to be relevant to: (a) the tracking of progress and/or difficulty that the young person experiences across the transition domains of employment, educational opportunities, living situation, and personal adjustment and community-life functioning; and (b) the types of services and supports required to assist these young people with serious emotional disturbance/serious mental illness (SED/SMI) and their families.

Social Solutions On Line was contracted to handle the data management portion of the PYT project. Data are entered into the company's proprietary, Web-based Efforts-To-Outcomes (ETO) Software™. ETO Software™ is a "customizable, web-based service management tool that relates an organization's efforts to the accomplishment of user-defined outcomes" (Social Solutions, 2004).

Results

Of the data presented from the ETO software system, selected aggregate demographic data ($N = 349$) show that the PYT initiative had enrolled 57.2% males and 42.8% females. Correspondent percentages on race/ethnicity included 55.1% Caucasian, 5.7% Hispanic, 4% African-American, 2.6% Native American, 1.1% each for Asian and Other, and 30.4% Unanswered. Age at intake was 43.4% 16-20, 29.1% 21-25; and 27.5% Unanswered. Marital status included 59.7% Single; 0.6% Married; 0.3% each for Domestic Partner, Separated, and Widowed; and 38.8% Unanswered.

The graphical output of documented legal activity data was selected to show the specificity of information gained from the system. This measure included the responses relating to arrests for felony charges (6.5%), misdemeanor charges (10.9%), nuisance status/petty charges (3.0%), and unknown seriousness of the charges (2.5%). Additional response percentages showed a significant proportion of young adults that had been placed on probation, parole, or other community control (10.7%), had been physically abused (11.2%), or had been sexually abused/assaulted (12.3%).

Early findings of progress illustrate changes from baseline to 2nd quarter (180 day) involvement. Variables of interest included daily living skills, homeless status and events, education status, and employment status and events. Significant improvements were seen in most daily living skills, which included baseline to 2nd quarter comparisons of doing own laundry most of the time (62.5% to 60.4%), paying own bills most of the time (12.5% to 29.2%), cooking for one's self most of the time (43.7% to 52.1%), having the ability to get around the community as necessary (35.4% to 54.2%), shopping for essentials most of the time (25% to 41.7%), taking medications as prescribed or as instructed on medication containers (64.6% to 73%), and cleaning one's own room or apartment (29.2% to 68.8%).

Findings for homeless status and events showed a promising overall trend, with baseline to 2nd quarter comparisons yielding a decrease in current homelessness (4.2% to 2.1%), less frequent movement that was not due to incarceration or treatment setting (16.7% to 12.5%), and decreases (4.2% to 2.1%) in having been kicked out of or turned away from one's home/residence, and having run away from one's home/residence.

Education status changes included baseline to 2nd quarter comparisons, with a slight decrease in enrollment in high school, vocational/technical school, or GED program (83.3% to 79.2%), and gains in enrollment in postsecondary school (6.3% to 8.3%), graduation from high school or receipt of a Certificate of Completion or GED (12.5% to 16.7%), and a slight decrease in having permanently dropped out of a high school or vocational/technical school (22.9% to 20.8%).

Employment status results showed an increase in current employment (20.8% to 35.4% from baseline to 2nd quarter), and second quarter events included the attainment of a new job or new employer (33.3%), promotion or receipt of a wage increase (6.3%), having left one's job voluntary (20.8%), and having been fired or laid off (10.4%).

Discussion

The preliminary demographic and progression findings showed that these youth and young adults experienced significant life event changes. While it is too early to draw definitive conclusions from this sample, the percentage changes thus far show an overall improvement trend in daily living skills, homeless status and events, education status, and employment outcome indicators.

Next steps include ongoing data integrity assurance, further data analyses (e.g., multiple demographic characteristics and service utilization outcomes), a process evaluation (i.e., efforts to ensure fidelity, barriers, and coordination), the development of a program manual, and sustainability support to include advocacy, additional collaborations, and public support. For additional information, please visit our two websites: http://ncyt.fmhi.usf.edu and http://tip.fmhi.usf.edu

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Symposium Discussion

Maryann Davis

The Partnerships for Youth Transition (PYT) grant program provides a rich opportunity to inform practice and research and knowledge regarding a grossly understudied population: youth with serious mental health conditions transitioning into adulthood. One challenge in studying this population is that there are few transition support programs for them across the country (Davis & Sondheimer, 2005; Davis, Geller & Hunt, submitted), which produces few opportunities to enroll them in studies, or to study the interventions used. The PYT program remedies this by having five sites that can enroll young people, provide innovative services to them, and examine innovative research approaches.

Another challenge in studying services for this population is the difficulty in finding meaningful existing instruments to measure changes in individual functioning and well being. Most instruments that measure functioning do so only with children (i.e., up to age 18), or only with adults (i.e., age 18 and older). While some adult instruments can be applied to those 16 and older, they are generally not designed to measure the acquisition of new functional capacities that are so typical of the transition period, and do not include family functioning (except as parents). Thus, a new instrument had to be developed for this grant project that would capture functional changes for this age group in a meaningful way.

The Transition to Adulthood Assessment Protocol (TAAP; Davis, Deschênes, Gamache, & Clark, 2004a, 2004b, 2004c) package has great face validity, inquiring about concrete areas of functioning with apparent meaning (e.g., was enrolled in any of a variety of educational settings, was living in a variety of settings, does own laundry most of the time). Unfortunately, the response of "typical" young people to these questions, which helps identify concerning responses, is unknown. Some items are significant by their nature (e.g., is currently homeless), but the significance of others is less apparent (e.g., mental health condition has interfered "some" since the last interview). Thus, the PYT programs provide an opportunity to examine the variability of these items within this population—and identify which ones vary over time, and which are intercorrelated. By the end of the grant period it may also be possible to identify which variables correlate with treatment.

These papers also indicate some unique characteristics of working with this age group. For example, Clark County's report that youth felt that minimizing family involvement in treatment was valuable, whereas family members were frustrated by this, is important to document so that others can anticipate this tension. Furthermore, this may be a variable that is important to test in the future; for whom or when does greater or lesser family involvement work best? There are numerous variables that might be important to examine in relationship to appropriate level of family involvement: youth's level of psychosocial development, quality of relationship with parental figures, quality of peer relationships, or feelings of self-sufficiency, among others.

Along a similar vein, both programs described in this symposium have demonstrated the importance of youth involvement in the research process—in helping design instruments, collect data through focus groups, and interpret data and findings. These programs will continue to provide valuable contributions to the growing knowledge base about serving and researching youth in transition to adulthood.

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Using the NCS to Answer Questions about the Transition to Adulthood

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Symposium Introduction

Maryann Davis

One challenge to conducting research on the transition from adolescence to adulthood among individuals with serious mental health conditions is that most large scale studies that could shed light on transition issues study youth up to age 18 or adults age 18 and older. Thus, one of the avenues for developing a rapid knowledge base, namely utilizing existing databases, is largely limited for transition issues because of the unavailability of data for ages before or after 18. In this regard the National Comorbidity Study (NCS; Kessler, 1994) is appealing. It is a large, nationally representative household survey of 15-54 year olds that used structured diagnostic research instruments to assess mental health and substance abuse diagnoses. It included daily functioning questions relevant to both adolescents and adults (e.g. inquired about school, work, family life). Further, it is publicly available, with good documentation. A second NCS has been conducted and will soon be publicly available.

This symposium summary describes the methodology of the NCS and some examples of its use for addressing transition issues. The first paper details the methodology of the NCS and highlights methodological issues particular to transition. The second paper asks the question: when do the changes of the transition period end and when does mature adulthood begin among individuals with psychiatric disorders? The third paper examines parenting issues among young women, focusing on those with post-traumatic stress disorder. The last paper raises issues of using the NCS to examine criminal activity, which is particularly relevant to the transition-age population.

Reference

Kessler, R. C. (1994). The National Comorbidity Survey of the United States. *International Review of Psychiatry, 6*(4), 365-376.

Overview of the Baseline NCS Methodology

Bernice Fernandes & Valerie Williams

Background

The analyses described in this summary used data from respondents in the Part II subsample of the Baseline National Comorbidity Survey (NCS; Kessler, 1994). Conducted from 1990 to 1992, the Baseline NCS was the first nationally representative mental health survey in the U.S. to employ a fully structured research diagnostic interview to assess the prevalences and correlates of DSM-III-R disorders and patterns and correlates of service utilization for these disorders (e.g., Kessler, 1994). Sponsored by the National Institute of Mental Health, the National Institute on Drug Abuse, and the W.T. Grant Foundation, the Baseline NCS Interview Schedule employed a face-to-face structured interview that was administered to a nationally representative household sample of 8,098 non-institutionalized, civilian persons aged 15 to 54 in the 48 contiguous states. Respondents were drawn from a nationally representative, stratified, multi-stage, area probability sample of persons in this age range in the non-institutionalized civilian population, including a supplemental sample of students living in campus group housing (Kessler et al., 1997a). The inclusion of individuals as young as 15, compared to the 18 year old lower age limit used in most general population surveys at the time, was based on an interest in minimizing recall bias of early-onset psychiatric disorders (Kessler et al., 1997b).

The NCS data have been one of the main sources of estimates of treatment need in the United States (U.S. Department of Health and Human Services, 2000) and have been used to address research questions regarding lifetime and 12-month prevalence of psychiatric disorders (e.g., Kessler et al., 1994a; Kessler, Sonnega, Bromet, Hughes & Nelson, 1995; Kessler et al., 1997b, 1997c), gender (e.g., Kessler et al., 1994b; Silverstein, 1999; Sheikh, Leskin & Klein, 2002), socioeconomic status (Bassuk, Bruckner, Perloff & Bassuk, 1998; Katz, Kessler, Frank, Leaf, & Lin, 1997; Mutaner, Eaton, Diala, Kessler & Sorlie, 1998; Wells, Klap, Koike & Sherbourne 2001), family formation and stability (Forthofer, Kessler, Story, & Gotlib, 1996; Kessler et al., 1997a; Kessler, Walters & Forthhofer, 1998), and interpersonal relationships (Zlotnik, Kohn, Keitner & Della Grotto, 2000), among others (e.g., Kessler & Frank, 1997; Kessler, Molnar, Feurer & Applebaum, 2001; Molnar, Berkman & Buka, 2001). The main content areas of the NCS include demographic characteristics, activities of daily life, mental and physical health status, history of substance use and abuse, marriage, employment, home and work, children, life event history, and family.

Methodological Details

NCS data were adjusted for non-response, variation in the probability of selection, and to approximate national population distributions (National Health Interview Survey; NHIS, 1989). With the exception of nonaffective psychosis, *DSM-III-R* diagnoses in the NCS were assigned based on structured interviews using a modification of the Composite International Diagnostic Interview (CIDI; World Health Organization, 1990), and the University of Michigan Composite International Diagnostic Interview (UM-CIDI; WHO, 1990). Nonaffective psychosis diagnoses were determined in re-interviews by experienced clinicians, following a screen for psychotic symptoms and using an adapted version of the Structured Clinical Interview for DSM-III-R (Kessler et al., 1994a).

The NCS interview was administered in two parts. Part I contained the core diagnostic interview, a brief risk factor battery, and items related to sociodemographic background information. Part II contained a much more detailed risk factor battery. Part I was administered to 8,098 respondents, while Part II was administered to a subsample of respondents consisting of all those in the age range 15-24 (99.4% of whom completed Part II), all others who screened positive for any lifetime diagnosis in Part I (98.1% of whom completed Part II), and a random subsample of other respondents (99.0% of whom completed Part II).

Strengths of the NCS

The main strengths of the NCS include its size (Part II subsample *n* = 5,877), representativeness, use of standardized diagnostic tools to assess psychiatric and substance abuse symptomatology, and use of experienced and well trained interviewers for data collection. Its public availability and detailed documentation facilitate its use to address a range of research questions. The wide age range (15-54 years) allows for the examination of individuals in both the adolescent and young adult stages of the transition to adulthood, as well as for comparisons against individuals in other adult age groups.

Limitations of the NCS

Because these data are cross-sectional, it is not possible to disentangle the timing and relationships among variables. In addition, these data are vulnerable to all of the weaknesses of retrospective self-report data. Because the data are representative of individuals living in the community, important institutional populations are not present in the data (e.g. long term residential settings, jails).

NCS-2 and NCS-R

Respondents in the baseline NCS were re-interviewed in 2001-02 (NCS-2) to collect information about changes in mental disorders, substance use disorders, and their predictors and consequences over the ten intervening years. This information would allow for the study of patterns and predictors of the course of mental and substance use disorders. The interview schedule for the NCS-2 was administered using computer-assisted-personal interviewing (CAPI; National Comorbidity Survey, n.d.) with a pre-loaded customized file for each individual that automatically pulled in relevant information about the respondent's reports in the Baseline NCS and used this information to customize skip patterns.

The NCS Replication Survey (NCS-R) was carried out in conjunction with the NCS-2 (2001-2002). The NCS-R drew from a separate national sample of 10,000 respondents aged 18 years or older. The goals of NCS-R were to study trends in a wide range of variables assessed in the Baseline NCS (replicate) and to obtain more in-depth information in some areas new to the NCS-R (expand). The interview schedule used in the NCS-R is a fully structured face-to-face interview that was administered by trained lay interviewers. As with the NCS-2, the NCS-R was administered using CAPI.

Accessing the Baseline NCS Dataset

NCS data can be accessed through the Internet on the Inter-university Consortium for Political and Social Research (ICPSR) website at: http://webapp.icpsr.umich.edu/cocoon/SAMHDA-DISPLAY/06693.xml

ICPSR provides an easily accessible public use file system containing all of the documents from the Baseline NCS and those relating to other data collection efforts in the NCS Program (e.g., NCS-2). This system is updated on a regular basis and also serves as an archive for paper abstracts and other NCS-related publications.

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Development Doesn't Stop at 18: Developmental Differences between Young and Less Young Adults

Maryann Davis & Valerie Williams

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Introduction

The age at which the transition from adolescence into adulthood is completed in current society extends well into the twenties and some argue into the thirties (Settersten, Furstenberg, Jr., & Rumbaut, 2005). Adult mental health systems, then, serve individuals at a critical developmental stage—young adulthood. Functional outcomes during young adulthood are appalling for youth with psychiatric disorders (e.g. Armstrong, Dedrick, & Greenbaum, 2003; David & Vander Stoep, 1997; Meich et al., 1999; Vander Stoep, et al., 2000; Wagner, 1995). Few specialized services for young adults are offered in adult mental health systems, and there is generally an absence of a developmental perspective (Davis & Hunt, 2005). The present study examined evidence that young adulthood is a developmentally different stage of life than older adulthood. By examining areas of individual functioning that are relevant to mental health treatment, we asked the following questions:

Question 1. Does individual functioning differ across adult age groups among individuals with psychiatric disorders?

Question 2. Is the rate of developmental change different in younger than older adults with psychiatric disorders?

Method

Subjects

The present study examined National Comorbidity Survey (NCS; Kessler, 1994) respondents aged 18-54 with a current (12 month) psychiatric diagnosis (substance use disorders were not considered psychiatric disorders). The sample (N = 1,110) was 75.9% White non-Hispanic, and 34.8% male. Pearson's Chi Square analysis indicated significant age differences in race, with younger groups containing more minority groups, $\chi^2(df = 15) = 29.2, p = .015$, but no gender differences, $\chi^2(df = 5) = 7.4, p > .10$.

Statistical Methods

Data were weighted to provide a national picture (see Kessler, 1994). Daily engagement, income and social functioning were analyzed. Variables were set to reflect typical young adult functioning (not working, never married, in school, etc.). Attending school and working were measures of daily engagement. Respondents were considered enrolled in school if they indicated they were a student (full or part time). Respondents were considered not working if they were not currently employed (full or part time), or not on temporary leave. Living at or below the Federal poverty level was used as the measure of income, and having daily contact with friends and having never married were used as measures of social functioning.

Pearson's Chi-square analyses (Cochran, 1952) were used to examine Question 1, by comparing younger (18-30 years old, N = 546) to older (35-54 years old, N = 563) respondents. Multiple regression analyses were used for Question 2 to examine the contributions of sex and race to age differences. These findings are preliminary in that weights have not been applied to correct for the level of significance due to inflation of standard errors caused by complex sampling. Quangles (Kotz & Johnson, 1981) were used to examine the point at which rates of change diminished. The quangle is the most efficient analytic procedure for detecting a single shift in mean level of a sequence of observations (e.g. rates over an age range). The observed rates for each age produce a sequence of rates over the age range. The quangle procedure starts by identifying the range of the rates, and defines both the minimum value and maximum value. Once these values have been identified, the rates (e.g. employment) are transformed into an angle Θ, by the formula:

$$\Theta = \pi/2 + (\pi * (\text{rate-min})/(\text{max-min}))$$

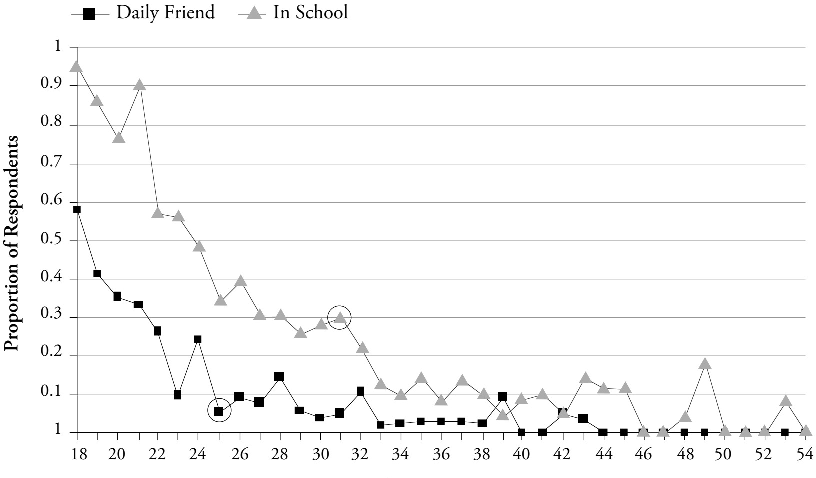
A unit vector is then constructed, with co-ordinates (cos(Θ), sin(Θ)), for each rate and these vectors are summed and plotted. Though the quangle provides an appealing *visual* representation of a change-point, it does not provide a statistical test associated with the significance of the change point.

Results

More young adults were still in school (21.8% vs. 2.0%), living below poverty level (24.2% vs. 8.9%), not married (55.0% vs. 29.5%), and having daily contact with friends (33.0% vs. 18.3%) than older adults, $\chi^2(df = 1) = 31.4\text{-}105.5$, 2-sided $p < .001$. Not working approached significance (31.0% vs. 24.7%), $\chi^2(df = 1) = 5.5$, 2-sided $p = .019$, but because this analysis did not adjust the variance to account for the design effect, this finding should be considered cautiously.

Multiple Regression analyses indicated that age was a significant factor in predicting each of the areas of functioning (see Figures 1 & 2). Age was the only significant factor (among age, race, and gender) predicting being in school (Adjusted $R^2 = .128$, $F(1,1276) = 188.3$, $p < .001$), and having daily contact with friends (Adjusted $R^2 = .033$, $F(1,1276) = 45.0$, $p < .001$, see Figure 1). Never having married was affected by age and gender (Adjusted $R2 = .075$, $F(2,1276) = 52.9$, $p < .001$), in which the rate of never having married changed more quickly and variably for males from ages 18-28, and more gradually and steadily for females from ages 18-30. Generally more women than men had married prior to age 28, whereas both genders tended to have been married at equal rates among those age 30 and older. Not working (Adjusted $R^2 = .026$, $F(3,1276) = 12.2$, $p < .001$) and living below poverty level (Adjusted $R^2 = .056$, $F(3,1276) = 25.3$, $p < .001$; see Figure 2) were affected by age, gender, and race. It is beyond the scope of this paper to describe in detail these 3-way interactions, suffice it to say that race and gender have strong effects on working and living in poverty throughout the age spectrum.

Figure 1
Proportion of Respondents with Current Psychiatric Disorders having Daily Contact with Friends, and Enrolled in School at each Adult Age



Note. Circled points indicate point at which rate of change has leveled off.

Quangles indicated that the age at which the rates of change in these areas of functioning slowed was between ages 25 and 31 (see Figures 1-2). Some quangles also indicated a second shift in functioning among individuals in their fifties.

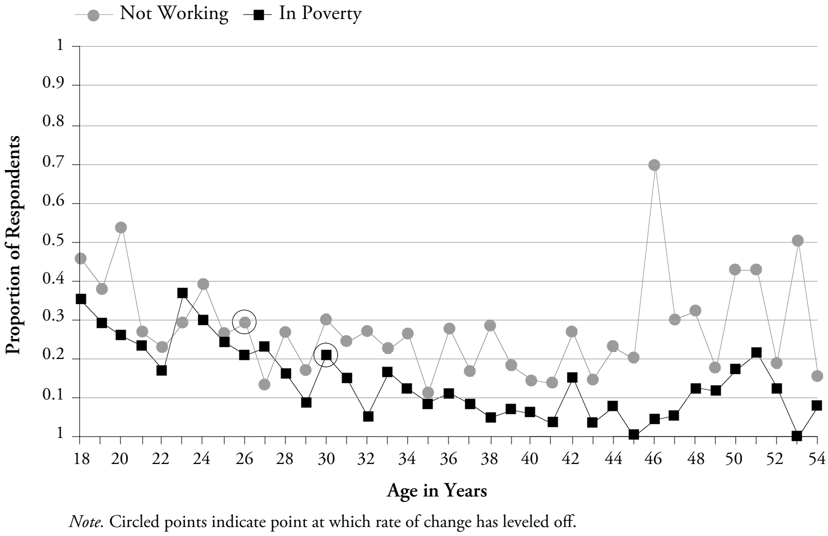
Discussion

These preliminary findings suggest that, like their non-disabled peers (Settersten et al., 2005), stable and mature adult functioning does not occur among youth with psychiatric disorders until they are in their late twenties and early thirties. Further, young adulthood is a period of rapid functional change that is markedly different from the relative stability of mid- to older-adulthood. It is more common for younger adults with psychiatric disorders to still be in school, to not be working, to live in poverty, to have not yet married, and to have daily contact with friends than it is for older adults.

Several limitations of the study are important to note. First, this is a cross sectional study. True developmental effects are best understood through longitudinal studies that reduce the impact of cohort effects. Thus, for example, marriage rates may be affected both by maturity and by different generational beliefs about marriage. The fact of the differences, regardless of cause, calls for different approaches to facilitating adult functioning in younger and older adults. The source of the causes (be they developmental, attitudinal, or other) are important for developing effective interventions and supports.

Another important limitation to the study is that the individuals most likely to be served in child or adult mental health systems are often in marginalized settings, such as residential or group treatment settings, boarding houses, homeless shelters, temporarily bunking with friends, on the streets, or in jail. Individuals in these types of settings were not sampled in this study. Because it is a household sample, this study reflects the functioning of individuals functioning well enough to be in a household setting. It is unlikely that the age related differences in functioning would not exist among those with the most impairing mental health conditions, but the specific rates of functioning may differ, and the ages at which change stabilizes may be different.

Figure 2
Proportion of Respondents with Current Psychiatric Disorders Not Working, and Living at or Below Poverty Level at each Adult Age



Note. Circled points indicate point at which rate of change has leveled off.

Despite these limitations, these findings strongly support the notion that young adults in adult mental health systems need either specialized programs or specialized approaches. Services for younger adults need to focus on *emerging* skills and capacities for employment and self sufficiency, the possible need to coordinate with school systems in helping younger adults complete their schooling, the continuing importance of peers, and the reduced likelihood of a spouse and thus, the increased likelihood of unmarried romantic or sexual issues.

Interviews with state level adult mental health administrators suggest that the unique needs of younger adults are not recognized within that system, and half of states don't have a single program within their adult system that is focused on the needs of young adults (Davis & Hunt, 2005). Findings from the current study suggest that this is insufficient to meet the needs of young adults in mental health systems. There is also little in the research literature on the separate needs of this age group, or on interventions for them. Research on the development of adult skills and capacities among young adults, and differences with mature adults within the mental health population, would help guide improvements in young adult services.

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The Consequences of Trauma for Mothers in the Transition Years

Joanne Nicholson & Valerie Williams

Introduction

National prevalence data, such as data from the National Comorbidity Survey (NCS; Kessler, 1994), allow for consideration of significant issues for young women who become mothers during the transition years from a public health perspective. Public policies and program initiatives may be informed by analyses of population-level data, with implications for the foci and timing of prevention, rehabilitation and treatment efforts, and points of service access for specific groups of individuals. The NCS provides the first opportunity to understand the prevalence of parenthood, and the relationship between parenthood and a variety of other variables in men and women with mental illness and substance use issues (Nicholson, Biebel, Williams, & Katz-Leavy, 2004). The implications of findings for young women who meet criteria for posttraumatic stress disorder (PTSD) are of particular interest.

Parenthood is a key life domain for women in the 15- to 30-year-old age group. In 2001, there were over 150,000 births to women age 17 and under (Guttmacher Institute, 2004). Women 18 to 19 years-of-age accounted for over 300,000 births, and in those 20 to 24 years-of-age, over 1 million births. Parenthood is prevalent among women who meet diagnostic criteria for mental illness (Nicholson et al., 2004). Seventy-three percent of women who meet lifetime criteria for PTSD are mothers. While some mothers experience the onset of symptoms following the birth of their first child, others experience mental illness prior to giving birth. Almost 70% of NCS mothers with PTSD, however, had their illness onset as youth, prior to the birth of their first children.

Given the concern in the literature that childhood experiences of violence may predispose an adult to poor parenting behavior (e.g., Banyard, Williams & Siegel, 2003), analyses of NCS data can provide important information on the background characteristics, childhood experiences of violence, substance abuse and mental health status of a large, representative sample of mothers, and on the impact of these variables on mothers' relationships with their children. Findings will have broad-scale ramifications for parenting intervention strategies for women in the transition years.

Method

Data from 522 mothers aged 15 to 30 in the NCS Part II subsample were used in the analyses. These respondents reported having one or more natural children at the time of the interview. Background characteristics, childhood history of violence, and lifetime substance abuse of mothers in three key groups are described and compared: (a) mothers with no lifetime mental illness ($N = 253$), (b) mothers with lifetime mental illness but no PTSD ($n = 196$), and (c) mothers with PTSD ($N = 73$). Mothers in the third group met criteria for other comorbid lifetime psychiatric diagnoses in addition to PTSD. For all categorizations based on diagnosis, we used UM-CIDI/DSM-III-R diagnoses without exclusions for DSM-hierarchy rules. Respondent groups are also compared on three additional variables—perceived relationship with child(ren), and two levels (*low* and *moderate*) of abusive behaviors towards child(ren).

Background characteristics included age, race, education, income, marital status, and number of children. For these analyses, childhood history of violence was defined as having ever experienced one or more of the following events as a child: rape; sexual molestation, serious physical attack and/or physical abuse. Lifetime substance abuse was defined as any alcohol and/or drug abuse (with or without dependence). The relationship with child(ren) variable was derived from a single item, "Overall, is your relationship with your child(ren) excellent, good, fair, or poor?" The abusive behaviors towards child(ren) variables were derived from two items rated on a four-point scale from *never* to *often*. The first of the two items, categorized as *low* level of abuse, asks "Since your child(ren) were first born…how often have you done any of the following things to your children: insulted or swore at your child; sulked or refused to talk to your child; stomped out of the room; did or said something to spite your child; threatened to hit your child; and/or smashed or kicked something in anger." The second item, categorized as a *moderate* level of abuse, asks "Since your child(ren) were first born…how often have you done any of the following things to your children: pushed, grabbed, or shoved your child; threw something at your child; and/or slapped or spanked your child."

Bivariate analyses comparing the three groups of mothers on each of the variables employed chi-square tests for nominal variables and analysis of variance for continuous variables. All estimates presented here were weighted and their associated standard errors adjusted for sampling design parameters using the appropriate SAS™ SURVEY procedures (SAS Institute, 2004).

Results

There are no significant differences across respondent groups in terms of age, race, education, income, marital status or number of children. Mothers with PTSD are significantly more likely to report childhood histories of violence than are mothers with mental illness and no PTSD, or mothers with no mental illness, $\chi^2(2, N = 522) = 95.18, p < .0001$ (see Table 1). Mothers with PTSD are significantly more likely to report lifetime substance abuse than are mothers with mental illness and no PTSD, or mothers with no mental illness, $\chi^2(2, N = 522) = 33.23, p < .0001$. Mothers with PTSD report significantly poorer relationships with children than do mothers in the other two respondent groups $F(2,519) = 3.67, p = .026$. Reports of low-level abusive behaviors towards child(ren) are not significantly related to respondent grouping $F(2,519) = .85, p = .43$. However, reports of moderate-level child abuse by mothers with PTSD are significantly higher; that is, moderate abusive behaviors are more frequent than in reports of mothers in the other two respondent groups $F(2,521) = 4.19, p = .016$. A childhood history of violence is associated with poorer ratings of perceived relationship with child regardless of respondent grouping (see Figure 1).

Discussion

While the NCS data provide information on a large, representative sample of women, it is important to note that data for these analyses were obtained at one point in time, in the mid-1990s. Reports of childhood history of violence, substance abuse, and the onset of psychiatric symptoms are retrospective; ratings of perceived relationship with children rely on mothers' reports alone, as do measures of abusive behaviors. Measures of PTSD have since been developed and refined. However, the NCS provides the first, and most extensive information on the variables of interest available from a large, nationally representative sample. As such, it is the best resource to date for placing these issues in a broader context essential for framing public health implications.

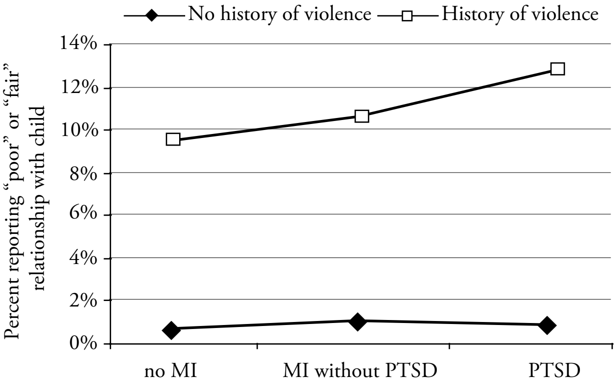
The prevalence of motherhood in women who meet criteria for PTSD, and the relationship between PTSD and mothers' perceived relationship with, and abusive behaviors toward their children highlight the importance of the accurate diagnosis and effective treatment of PTSD in adolescent and young women, even prior to motherhood. Trauma-specific treatments for young women with PTSD should focus on nurturing and care-giving skills as well as on self-care, symptom management, relationship skills and recovery—both before women become mothers and while they are parenting. Perinatal health care clinicians must acknowledge the impact of trauma on parenting, assess women's history of violence and impact on their current functioning, and provide psychoeducation regarding the impact of early experiences of violence on parent-child relationships.

Table 1
Descriptives by Respondent Group

Variable	*No MI (N=253)*	*MI (no PTSD) (N =196)*	*PTSD (N =93)*	*Total (N =522)*
Childhood history of violence (%)*	9.3	16.5	59.9	19.1
Substance abuse (lifetime) (%)*	14.3	29.9	44.6	24.4
Relationship with child (mean)†	3.8	3.6	3.5	3.7
Low-level abusive behaviors towards child (mean)‡	1.8	1.9	1.9	1.8
Moderate-level abusive behaviors towards child (mean) †‡	1.9	2.1	2.2	2.0

* $p < .0001$, †$p < .05$, ‡ higher rating = more frequent abusive behaviors.

Figure 1
Perceived Relationship with Child by History of Violence



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"Trouble with the Police and Courts:" What the National Comorbidity Survey Can and Cannot Tell Us About the Behavioral Health Antecedents of Juvenile and Adult Offending

William H. Fisher & Steven M. Banks

Introduction

Challenging social norms is a commonly observed feature of adolescence. But "pushing the envelope" of socially accepted behavior may at times bring individuals into conflict with the law. Juveniles can break the law in two ways. One is by committing *status offenses*—behaviors such as truancy and running away from home that are unlawful only for individuals under a certain statutorily imposed age. The other is through engaging in behaviors that constitute criminal offenses regardless of the perpetrator's age.

Understanding the correlates and patterns of juvenile offending or delinquency has long enjoyed the attention of criminological researchers. This is not surprising. Many of the crimes against persons and property committed by juvenile offenders have major social costs and consequences. They also raise concern about individuals' future criminal involvement. Investigators and theoreticians working within the so-called "developmental criminology" framework, (see for example Gottfredson & Hirschi, 1990; Sampson & Laub, 1993, 2003) Moffitt (1993), and Nagin & Farrington, 1992) raise the question of whether juvenile offending is a unique class of criminality, or whether it is a prelude to later adult offending. Finally, youthful offenders themselves pay a price for their unlawful behavior. Having a record can place significant limitations on future educational, employment and social opportunities, particularly if that record includes offenses that are not classified as status or other juvenile offenses.

The psychological aspects of juvenile offending have not gone unstudied, as the work of Moffit (1992) and others clearly attests. However, such research shares many of the same difficulties as similar efforts with adult offenders. While there are data, such as the Pittsburgh Youth Study, that provide considerable detail on the psychological status of offenders and non-offenders, there has been a dearth of large-scale studies that bring state-of-the-art epidemiologic methods to nationally-based samples of individuals while also capturing information on criminal offending. In this discussion we examine the potential and the limitations of one of the most commonly used psychiatric epidemiologic studies, the National Comorbidity Survey (NCS) for exploring the linkage between serious emotional and mental disorders and juvenile and early adult offending.

The National Comorbidity Survey (NCS)

As the premier basis for psychiatric epidemiologic research, the National Comorbidity Survey (Kessler, 1994) should provide an excellent vehicle for investigating psychological antecedents of offending for both adults and juveniles. Unfortunately, its current form includes a number of features that seriously limit its use in this domain. These limitations are in two areas: the lack of specificity in items used to capture individuals' offending histories, and the use of household samples. These will be discussed separately.

Trouble with Police and the Courts

Definitional issues

The NCS includes only one question addressing any form of legal involvement. This question is, "In the past 12 months have you had problems with the police or courts?" Overall, roughly four percent of respondents aged 18-30 answered in the affirmative; however, these rates vary dramatically by gender and history of a mental illness. Specifically, females less than age 30 with mental illness are nearly twice as likely to have had trouble with the police or courts as females with no mental illness (1.1% vs. 0.6%), while males less than age 30 with mental illness are more than twice as likely to have had trouble with the police or courts as males with no mental illness (11.4% vs. 4.8%).

As these data indicate, males between age 15-30 with a history of mental illness had the highest rates of reported legal problems among the four groups of individuals. But what does this mean? "Trouble with the police" may be a reasonable framing of a question seeking to probe individuals' encounters with the criminal justice system. It is particularly useful as a way to examine experiences, which many adolescents may have, of being harassed or confronted by police but of not being arrested. But this advantage is also a disadvantage; there is no way of telling from the response to this question who has been arrested and who has not, and this distinction has tremendously important social ramifications. The waters are muddied further by the inclusion of the courts, because there is no differentiation between civil problems and criminal problems. As such, this question invites positive responses that can derive from a very broad array of issues extending well beyond the domain of delinquency or criminal offending. These can include motor vehicle problems, housing issues, civil suits, divorce, child custody and support issues, and so on. Juveniles may or may not answer in the affirmative if their only brush with the law was a status offense. We thus may be on very thin ice if we choose to consider all affirmative responses to this question as indicative of involvement in the criminal or juvenile justice systems. And while it is tempting to use this item as a surrogate for criminal involvement and proceed with using the rich array of risk factors available in the NCS, this would be risky.

The use of household samples

The NCS is but one of a class of national studies of psychiatric and substance abuse issues (the National Household Survey of Drug Abuse is another) that uses persons living in households as its sampling universe. This choice of sampling frames is both puzzling and seriously limiting with regard to the kinds of questions one can address, as is evident when one considers the range of individuals who are excluded by virtue of their residence. Among the classes of excluded individuals are persons living in any kind of institutional or group quarters, including psychiatric and substance abuse facilities, juvenile detention centers, adult correctional facilities, residential programs for adults or adolescents with substance abuse or psychiatric disorders or homeless shelters. Also excluded are homeless persons or persons who are unstably housed and thus have no fixed address.

This approach therefore systematically excludes many individuals who comprise the sample of greatest interest when one wishes to explore risk factors for offending. It similarly excludes individuals with mental, emotional, and/or substance abuse disorders that are so severe that they reside in other than a household setting. This sampling approach may significantly bias certain NCS analyses. For example, differential risks of incarceration for Whites and African-Americans, coupled with the strong relationship between offending and substance abuse, can seriously skew findings regarding the relationship between race/ethnicity and the use of substances. The extent of potential sampling bias arising from the use of household samples has not been documented but clearly should be, given the widespread use of such designs in research on behavioral health.

Looking to the Future

In many ways the NCS, as currently conceived, represents a missed opportunity with regard to studying critical questions about offending by both adolescents and adults, and about the host of psychiatric and social risk factors available in the NCS. Granted, these questions were by no means the central focus of the NCS. Nonetheless, future generations of population-based psychiatric epidemiologic studies need to expend the not inconsiderable resources necessary to include these currently excluded populations, and to work with the criminal/juvenile justice communities and criminologists to identify efficient and reliable methods for measuring justice system involvement and its correlates.

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Symposium Discussion

Steven M. Banks

This symposium has focused on the use of the epidemiological databases, specifically the National Comorbity Survey (NCS; Kessler, 1994) to address issues associated with transition to adulthood. What has become clear is both the potential value and limitations associated with using these national databases. As is evident by the range of topics (e.g. employment, motherhood, trouble with the law), the NCS has a wide scope that allows for the examination of a wide range of important domains. As noted above, a replicate NCS is nearing completion and other national epidemiological studies with an interest in mental illness and substance abuse are also currently being analyzed (e.g. The National Epidemiologic Study on Alcohol and Related Conditions (NESARC). The NESARC (see for instance Grant et al. 2004), funded by National Institute of Alcohol Abuse and Alcoholism, is a longitudinal survey that collected its first wave of interviews in 2001-2002. In the not to distant future, these databases will become publicly available, and will be of tremendous value to researchers studying transition to adulthood. In addition to using these databases as a primary research tool, they will also be useful in addressing questions regarding generalizability of our own research findings. An example of this may be seen in the work by Fisher and colleagues (2002), who compared findings at a specific location to findings from the NCS.

Though it would be easy to see these large epidemiological databases as a research nirvana, the authors of the papers in this session have raised serious concerns regarding the ability of these databases to address important policy issues. These concerns fall into three broad categories: who can be selected for the sample, cross sectional nature of the data, and the specific content of the variables in the database. Regarding the sampling issue, reliance on a community sample may be of primary concern when the research questions deal with groups of individuals or outcomes that may remove a class of individuals from consideration. Some of the newer epidemiological surveys are trying to incorporate these non-community populations, or specific surveys of these populations are being mounted so that a complete picture of individuals may be more possible in the future. Both the NCS and the NESARC will be performing longitudinal surveys, so concerns regarding the cross sectional nature of the data can begin to be addressed. Finally, as the field of behavioral services research matures, standardized instruments will begin to be used more often in epidemiological studies, which will increase the utility of the data collected.

As I have argued elsewhere, (Pandiani & Banks, 2003) large data sets are a powerful tool in services research. I believe the authors have demonstrated that with the work presented in this symposium.

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Symposium

Youth with Serious Emotional Disorders in Transition to Adulthood from Special Education and Juvenile Justice Settings

Chair
Maryann Davis
Authors
Mary Wagner
He Len Chung et al.

Symposium Introduction

Maryann Davis

Youth with serious mental health conditions are found in all public child-serving systems. Each will traverse the path from adolescence to adulthood. That path starts to accelerate in early adolescence and, because of the many institutional changes at ages 18 or 21, becomes a critical jumping off point around ages 17 and 18. Both of the papers in this symposium examined questions about the characteristics of youth with serious mental health conditions during the early- to-mid transition years, using large, longitudinal studies, but each from a different service system.

The first paper is an important addition to our knowledge about the particular challenges faced by students with emotional disturbances (ED) in secondary school. This study highlights some of the factors that identify those with ED who do well academically and behaviorally, and those who do poorly, and in so doing provides both risk markers and potentially malleable factors. The second paper adds to the growing interest in mental health needs of youth involved with juvenile justice systems. This paper asked questions about the prevalence of disorder and service utilization by youth who were earlier and further along the pathway to adulthood, and raises important concerns about service access at the threshold of adulthood.

NLTS2: A National Look at the Academic Performance and Social Adjustment of Secondary School Students with Emotional Disturbances

Mary Wagner

Introduction

Numerous studies have documented high rates of school dropout in youth with emotional disturbances (ED; e.g. Wagner, 2005; Vander Stoep, et al., 2000; Vanderstoep, Weiss, Kuo, Cheney & Cohen, 2003). Entry into adulthood without a high school diploma is particularly detrimental in current society (Furstenberg, Rumbaut, & Settersten, 2005). Many factors likely contribute to the high dropout rate in this population. For example, studies of youth with ED have documented behavioral and academic difficulties at school. Students with ED are likely to exhibit high rates of inappropriate behavior and low rates of positive behavior (e.g., Landrun, Tankersley & Kauffman, 2003; Walker, Hops, & Greenwood, 1993). They also can experience difficulties establishing and maintaining positive social relationships (Walker, 1995) and may exhibit internalizing behaviors such as anxiety, withdrawal, and depression (Lane, Wehby, & Barton-Arwood, 2005; McConaughy & Skiba, 1993). Students with ED are likely to have problems in learning-related areas, such as attention to task and academic engagement (Landrum et al., 2003) and significant deficits in academic achievement (Wehby, Lane, & Falk, 2003). But these generalizations about students with ED mask the wide variation in both their behavioral and academic performance. Understanding who is at greatest risk for behavioral or academic difficulties is an important step in serving them well, and improving dropout rates. Here, data from the National Longitudinal Transition Study-2 (NLTS2) are used to provide a picture of the range in school behaviors and academic performance of students with ED nationally.

Methods

NLTS2, conducted by SRI International for the U.S. Department of Education, involves more than 11,000 youth who received special education services in grade seven or higher when the study began; of these, 825 are categorized as having ED. Data are reported from 2001 telephone interviews with parents and from mail surveys of school staff serving sample members in Spring 2002; youth were ages 13 through 18. Scores on research editions of passage comprehension and mathematics calculation subtests of the Woodcock-Johnson III (WJ-III; Woodcock, McGrew, & Mather, 2001) also are presented; youth were 16 through 18 at the time of assessment. Students' functional cognitive skills were measured by parent rating on a 4-point scale of how well youth could tell time on an analog clock, count change, read common signs, look up telephone numbers and use the phone. Scores on these were summed to create a functional scale. Students' social skills were rated by parents using items from the Social Skills Rating System (SSRS; Gresham & Elliott, 1990). Comparisons between youth with ED and youth with disabilities as a whole provide a context for interpreting results for students with ED; percentages and means are weighted to represent those groups nationally. Comparisons also are made with youth in the general population where comparable data are available (e.g. National Survey of America's Families; Urban Institute, 2005). Results of *F* tests indicate the statistical significance between youth with ED and these comparison groups. Logistic and ordinary least squares regression analyses were used to identify the independent relationships of individual and household factors to variations in behavior and academic performance.

Results

Academic Performance

Secondary school youth with ED have serious deficits in both their reading and mathematics abilities (see Table 1). However, students with ED scored comparably to all students with disabilities, if not better. Despite having academic abilities that were as good or better than students with all disabilities, youth with ED were more likely to receive poor grades. Among students with ED and students with all disabilities taking at least one general education class, teachers reported that similar proportions were able to "keep up," with a sizeable group of both who did not.

Behavior

Students with ED fared significantly worse than students with all disabilities on all measures of behavioral difficulties in school (see Table 1). On measures that are available for the general student population, even greater discrepancies are noted. In social interactions outside of school, students with ED generally were comparable to students with all disabilities, though they were less likely than the general student population to engage in extracurricular groups (Table 1). Students with ED were at greatly heightened risk of arrest at each age compared to students with disabilities as a whole, and at age 16 compared to the general student population. Overall, though, for each problem behavior except disciplinary action, the majority of students with ED were not involved.

Factors Associated with the Academic Performance and Behavior of Students with ED

Functional factors. As can be seen in Table 2, functional cognitive skills were positively associated with being closer to grade level in reading and mathematics, and receiving disciplinary action, but were unrelated to grades and being arrested. Students' social skills were unrelated to academic performance, but poorer social skills were related to a greater likelihood of school disciplinary action. Persisting with a task "even if it's hard" was associated with earning better grades and avoiding arrest; in contrast, it also is associated with being further below grade level in math.

Table 1
Academic Performance and Behavior of Youth with ED, Youth with All Disabilities, and Youth in the General Population

	Secondary School Youth		
	With ED	*With All Disabilities*	*General Population*[a]
Academic Performance			
Percentage with scores on standardized test of passage comprehension in the: (a)			
Bottom quartile (0% to 25%)	64	76**	25***
Second quartile (26% to 50%)	18	12	25
Third quartile (51% to 75%)	9	6	25***
Top quartile (76% to 100%)	8	5	25***
Percentage with scores on standardized test of mathematics calculation in the: (a)			
Bottom quartile (0% to 25%)	55	58	25***
Second quartile (26% to 50%)	22	18	25
Third quartile (51% to 75%)	17	18	25**
Top quartile (76% to 100%)	6	6	25***
Percentage with grades that are: (b)			
Mostly As and Bs	28	30	
Mostly Ds and Fs	14	8*	
Percentage ever held back a grade (c)	38	36	
Percentage in general education academic classes whose teacher report youth keeps up with other students in class (c)	65	74	
Behavior in School			
Percentage whose teacher says in class they "very often": (d)			
Act impulsively	20	9*	
Argue with others	13	4*	
Control behavior to act appropriately	31	47*	
Percentage who in current school year have:			
Gotten along poorly with: (c)			
Students	28	13***	
Teachers	26	12***	
Been bullied or picked on at school (c)	42	29***	12***
Bullied others at school (c)	36	16***	
Been in fights (c)	42	23***	4***
Been subject to disciplinary action (b)	60	34***	
Been expelled (b)	18	5***	
Received out-of-school suspension b)	30	11***	
Percentage whose parents report youth has ever been: (c)			
Suspended or expelled	73	33***	
Behavior out of School			
Percentage whose parents report youth: (c)			
Participates in organized extracurricular group	57	65	83***
Sees friends outside of school four or more times a week	34	31	
Is invited to other students' social activities	83	85	
Arrested among youth age:			
13 or 14	24	8***	
15	35	25***	
16	42	15***	12***
17	49	16***	

Note. Comparisons with youth with ED statistically significant in a two-tailed test at the following levels: *p<.05, ***p<.001.
Sources: (a) NLTS2 Student Assessment, 2002 and 2004; (b) NLTS2 Wave 1 Student's School Program Survey, (c) NL:TS2 Wave 1 parent interview; (d) Wave 1 General Education Teacher Survey.

Table 2
Factors Related to the Academic Performance and Behavior of Youth with ED

	Dependent Variables				
	Closer to Grade Level in Reading	*Closer to Grade Level in Math*	*Overall Grades*	*Subject to Disciplinary Action at School*	*Has Ever Been Arrested*
Functional factors					
Functional cognitive skills	+***	+***		+**	
Social skills				–**	
Persistence		–*	+***		–**
Demographics					
Age	–*		–*		+***
Gender					+**
Number of school changes					+*
Family support					
Expectations for postsecondary education			+**		–***
School factors					
Student's grades	NI	NI	NI	–**	
Number of academic accommodations provided student	–**	–**			
Receives tutoring services			–**		
Number of social supports provided student at school				+*	+*

"–"indicates negative relationship
"+" indicates positive relationship
NI = Not included in the model indicated
Statistically significant relationship to the dependent variable in a regression model containing all variables listed at the following levels: $^{*}p < .05$; $^{**}p < .01$, $^{***}p < .001$.

Demographics. Older students with ED were significantly more likely to be behind grade level in reading, to have poorer grades, and to have been arrested at some time (Table 2). Males, and students who changed schools often, were more likely to have been arrested than their counterparts. Neither the race/ethnicity of students nor their household income was significantly related to any of these measures.

Family support. Parents' expectations that their adolescent would pursue postsecondary education was associated with higher grades, although not with reading or mathematics performance (Table 2). Higher parental education expectations also related to lower arrest rates. Neither family support for education at home or support at school was related to these measures.

School factors. Students who received better grades were less likely to get in trouble at school (Table 2). The direction of the relationship between supports or accommodations that students are provided to help them succeed academically and behaviorally suggests that students doing worse academically got more academic supports and students with more behavior problems got more social supports.

Conclusion

Although students with ED, as a group, demonstrate significant academic deficits and negative behaviors at school on all academic and behavior measures examined, some students demonstrate exceptionally poor performance and behavior whereas others succeed academically and exhibit positive behaviors at school. This heterogeneity in the population of students with ED highlights the importance of understanding the factors that distinguish them.

These findings show that having higher functional skills is a mixed blessing. For example, having higher functional cognitive skills is associated with being closer to grade level academically but also with a higher likelihood of getting in trouble at school. Similarly, being more persistent in the face of challenging tasks is related to having higher grades and a lower likelihood of arrest, but also to being further behind grade level in math, perhaps because those who are further behind need to work harder academically.

The relationship of age to outcome measures suggests that youth with ED exhibit something of a downward spiral over time, with older youth being farther behind grade level, having poorer grades, and accumulating an arrest record at higher rates than younger peers, independent of other differences between them. This is a particularly unfortunate pattern at the threshold of adulthood and post secondary life; it suggests that the earliest secondary school years, or earlier, are critically important to reversing this negative spiral. Further, a history of frequent school change is related to a higher likelihood of arrest—a finding worth noting, given that students with ED have higher school mobility than youth with disabilities as a whole, more than often due to reassignment by their schools (Wagner, 2005), a factor that can be changed via school policy. The importance of parents in their children's lives is reinforced by the finding that parents' high expectations for the educational careers of their adolescent children with ED relate to more positive academic and behavior outcomes.

A consideration of malleable factors associated with better academic and behavioral performance indicates that early interventions might focus on improving functional cognitive skills, reducing school mobility, and encouraging parental educational expectations. A more subtle change is also suggested. Since students with ED performed better on tests of their reading and mathematics abilities than their grades reflected, and because poorer grades were associated with greater school disciplinary action, it is possible that some students with ED are undeservedly perceived as bad students—both in terms of behavior and performance.

The finding that academic and behavior services and supports were associated with poorer academic performance and behavior, respectively, underscores the difficulty in identifying their benefits in the absence of random assignment or more sophisticated statistical approaches (e.g.Trochim, 1990). When receipt of supports is measured simultaneously with their target outcomes, their potential to benefit students is obscured. Fortunately, NLTS2 measures youth outcomes multiple times over its 10-year life. This longitudinal design will enable the disentangling of services from need for services via analyses of the relationships between services received during secondary school and outcomes later in life.

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Mental Health Problems, Court Involvement, and Service Utilization among Serious Juvenile Offenders

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Introduction

As a group, delinquent youth often lag behind their peers on traditional markers of adult success, such as graduating from high school or finding employment (see Chung, Little & Steinberg, 2005). In recent years, dismal outcomes have been linked to findings that mental health (MH) disorders among juvenile offenders are three to four times as high as in the general adolescent population, and that youth with emotional/behavioral disorders have trouble achieving positive outcomes linked to desistance from crime (Grisso, 2004). And yet, despite repeated suggestions that inadequate attention to MH problems can lead to adult offending and poor adjustment, researchers know surprisingly little about the link between MH needs and service utilization among court-involved youth.

The current study explores relations between age, psychiatric problems, and service use among delinquent youth to examine whether older offenders are at risk for losing potential support services as they move into adulthood. We ask three questions regarding differences among juvenile offenders who are early- and mid-transition age: (1) do younger and older offenders show different rates of MH and substance use (SU) diagnoses?; (2) following court involvement, are age and diagnosis related to service use after accounting for other individual characteristics?; and (3) do younger and older offenders with diagnosable MH and SU problems show different levels of service utilization?

Method

Sample

Data come from Research on Pathways to Desistance (RPD), a longitudinal project for adolescent offenders in Pennsylvania and Arizona (see Mulvey et al., 2004 for theoretical framework; see Schubert, et al., 2004 for operational details). Enrolled individuals were between the ages of 14 to 18 and were found guilty of a serious crime. Participants were interviewed soon after adjudication (baseline) and every six months thereafter (follow-up). The sample ($N = 926$) used in the current analyses was primarily comprised of African-American (44%), Hispanic (30%), and Caucasian (21%) offenders. Eighty-five percent of participants were male. At the time of their baseline interview, 66% were 14-16 years old (younger), and 34% were 17-18 years old (older). Data through 24 month-follow-up interviews were used in the analyses.

Measures

Information about age, gender, and race were collected for all subjects at baseline. The RPD assessed past-year diagnoses for the following mental heath disorders at baseline using a modified version of the Composite International Diagnostic Interview (World Health Organization, 1994): Major Depressive Disorder (MDD), Dysthymia, Mania, Posttraumatic Stress Disorder (PTSD), Alcohol Abuse/ Dependence, and Drug Abuse/Dependence. Participants were identified as having a MH disorder if they met criteria for MDD, Dysthymia, Mania, or PTSD, and for a SU disorder if they met criteria for alcohol or drug abuse/dependence.

A modified version of the Child and Adolescent Services Assessment (Ascher, Farmer, Burns & Angold, 1996) identified participants' use of the following community services at follow-up: psychologist, priest, day treatment/partial hospitalization, emergency room, case manager, community support group, and MH group. Participants were also specifically asked whether they used any of these services for drug and alcohol (D&A) reasons. For this study, we assessed service use differently depending upon court disposition. For individuals who remained in the community (probation), we examined the period three months following the baseline interview. For those who were sent to an institution as a result of court action (placed), we examined the period three months following discharge from the institution (aftercare); disposition did not include time in detentions centers, and focused primarily on stays at juvenile correctional facilities and residential treatment. We created two dichotomous variables to describe services used in the community: (1) counseling (*yes* = using any of the services for emotional or behavioral, but not D&A, problems); and (2) D&A (*yes* = using any of the services for D&A problems).

Statistical Analyses

Crosstabulation tests were used to address questions 1 and 3. Logistic regression analyses were used in question 2 to predict the use of counseling and D&A services with the following variables: gender, ethnicity, site, prior offenses, age, and diagnosis (MH for predicting counseling services, SU for predicting D&A services).

Results

Question 1: Do younger and older offenders show different rates of MH and SU diagnoses?

There were no significant differences in overall rates of the MH diagnoses assessed. However, older offenders were more likely to have a SU diagnosis in both Philadelphia and Phoenix (39% versus 23%, and 53% versus 41%, respectively). Overall, offenders in Phoenix had higher rates of SU disorders, but the relation between age and diagnosis was similar across both sites (see Table 1).

Table 1
Comparison of Younger and Older Offenders
with Mental Health and Substance Use Diagnoses

	Philadelphia		*Phoenix*	
Diagnosis	*14-16 (n = 329) n (%)*	*17-18 (n = 215) n (%)*	*14-16 (n = 283) n (%)*	*17-18 (n = 99) n (%)*
Mental Health	26 (8)	23 (11)	30 (11)	12 (12)
Substance Use	75 (23	83 (39)***	116 (41)	52 (53)*

Note. Philadelphia Mental Health: $\chi^2(1, N=544) = 1.24$, *ns*; Phoenix Mental Health: $\chi^2(3, N = 382) = 0.17$, *ns*; Philadelphia Substance Use: $\chi^2(1, N = 544) = 15.77$, $p < .001$; Phoenix Substance Use: $\chi^2(1, N = 382) = 3.96$, $p < .05$
***$p < .001$; *$p < .05$

Question 2: Following court involvement, are age and diagnosis related to service use after accounting for other individual characteristics?

Relations between age, diagnosis, and service use were examined separately in the *placed* and *probation* offenders. Because relatively few youths in the two court groups met criteria for a MH diagnosis ($n = 45$ for probation; $n = 46$ for placed), analyses were not conducted separately by site.

For the probation group ($N = 495$), 47% and 16% of offenders reported using counseling and D&A services, respectively. Logistic regression analyses showed that younger offenders and those with MH diagnoses were more likely to use counseling services, and offenders with a SU diagnosis were more likely to use D&A services (see Table 2). For the placed group ($N = 431$), 35% and 8% of offenders reported using counseling and D&A services, respectively. In contrast to the results for the probation group, analyses of the placed group showed that neither age nor having a diagnosis were important for predicting either service in the aftercare period. Follow-up analyses indicated no age by diagnosis interactions in any of the models.

Table 2
Logistic Regression Analyses for Service Use Among the Probation and Placed Groups

Probation Group (N = 495)

	Counseling Services			*D&A Services*		
Predictor	*B*	*SE*	*Exp(B)*	*B*	*SE*	*Exp(B)*
Site^a	-.40	.27	.67	-.09	.46	.92
Age^b	.63	.23	1.88**	-.26	.35	.77
Gender^c	.57	.24	1.76*	.88	.36	2.41*
Ethnicity						
African-American^d	-.39	.32	.68	-1.25	.59	.29*
Hispanic^d	-.71	.24	.49**	-.66	.37	.52
Prior offenses	.06	.06	1.06	.12	.08	1.13
Mental Health Diagnosis^e	.73	.34	2.08*	—	—	—
Substance Use Diagnosis^e	—	—	—	1.27	.35	3.57***
Model $\chi^2_{(df)}$		33.82***			41.18***	
Nagelkerke R^2		.09			.18	

Placed Group (N = 431)

	Counseling Services			*D&A Services*		
Predictor	*B*	*SE*	*Exp(B)*	*B*	*SE*	*Exp(B)*
Site^a	-.58	.34	.56	-.81	.52	.44
Age^b	.49	.25	1.64	.35	.51	1.42
Gender^c	.44	.37	1.55	.73	.57	2.08
Ethnicity						
African-American^d	-.74	.31	.48*	-1.46	.6	.23*
Hispanic^d	-.62	.34	.54	-.56	.51	.57
Prior offenses	-.18	.06	.84**	-.09	.09	.91
Mental Health Diagnosis^e	-.63	.39	.53	—	—	—
Substance Use Diagnosis^e	—	—	—	.59	.46	1.80
Model $\chi^2_{(df)}$		35.82***			25.59**	
Nagelkerke R^2		.11			.16	

Note. Reference groups are ^{a}Phoenix, ^{b}17-18 years old, ^{c}Male, ^{d}Caucasian, ^{e}No diagnosis
$^*p < .05$, $^{**}p < .01$, $^{***}p < .001$

Question 3: Do younger and older offenders with diagnosable MH and SU problems show different levels of service utilization?

The last set of analyses focused on the subset of offenders who met criteria for a MH or SU diagnosis: there were 45 MH probation offenders (28 younger, 17 older); 46 MH placed offenders (28 younger, 18 older); 153 SU probation offenders (95 younger, 58 older); and 173 SU placed offenders (96 younger, 77 older).

In the probation group, results showed a trend for fewer older MH offenders to use counseling services compared to their younger counterparts (29% versus 61%, $\chi^2(1) = 4.15$, $p < .10$), but no differences in the use of D&A services among older and younger offenders with SU diagnoses (18% versus 21%, $\chi^2(1) = 0.18$, *ns*, respectively). In the placed group, older offenders were also less likely than younger offenders to use counseling services within three months of returning to the community (6% versus 36%, respectively, Fisher's exact test: $p = .02$), and results showed a trend for fewer older substance offenders to use D&A services compared to their younger counterparts (5% versus 13%, respectively, Fisher's exact tests: $p = .08$).

Discussion

Limitations

This study has at least three limitations that should be recognized. First, we used a restricted definition of MH problems that did not include certain disorders prevalent among juvenile justice populations (e.g., ADHD); in addition, we did not consider psychiatric problems that did not meet criteria for a DSM-IV diagnosis. Second, our MH variables were obtained from baseline interviews and not assessed when individuals left residential facilities when psychiatric symptoms might have differed from those reported at the start of the study. And third, all service use data were self-reported by youths, thus increasing the potential for inflated shared method and source variance.

Implications

The limitations of this study notwithstanding, results indicate that almost 40% of serious adolescent offenders met criteria for a MH or SU diagnosis other than a disruptive behavior disorder within the year prior to enrollment in the RPD study. Results also indicate that older offenders are more likely to have SU disorders than younger offenders. Further, results suggest that older offenders with a previous diagnosis of MDD, PTSD, dysthymia, or mania may be at particular risk for not using services in the community, especially following discharge from a residential facility; in fact, only one older offender who met criteria for a MH diagnosis reported using counseling services within three months of returning to the community. The use of aftercare D&A services among older SU offenders was only slightly lower (and not significantly different) than that of younger offenders; however, given that the first few months following discharge are considered the "danger time"—when youths are at high risk of getting re-arrested (Snyder, 2004)—the low level of service use among older SU offenders is disconcerting.

That older offenders with MH problems may disconnect from services in the community could reflect a reticence in this age group to engage in services. It could also reflect the fact that services in the juvenile justice system have been specifically developed and designed to serve children and adolescents. Although many states, including Pennsylvania and Arizona, have statutes that extend juvenile court jurisdiction to age 20, the provision of services is grounded in a justice system that targets juveniles. Indeed, most of the screening instruments used by the juvenile court to assess individual (and family) needs and strengths typically lead to recommendations for youth ages 12 to 17, and services may not fit the needs of older offenders who are entering their early adult years (Grisso & Greenwood, 2004). With growing evidence that delinquent youth face significant challenges during the transition to adulthood, and that inadequate attention to MH problems may lead to adult offending and other poor outcomes, future analyses with RPD data will examine the impact of service use (or lack thereof) on promoting positive adult adjustment among serious juvenile offenders.

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Informing Systems of Care for Transition Aged Youth: Youth Focus Group Results

Sheila Bell
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Introduction

The Allegheny County System of Care Initiatives (SOCI) is a mental health system of care program funded by the Substance Abuse Mental Health Services Administration and the Allegheny County Department of Human Services. SOCI provides service coordination and support to children with serious emotional disturbance and to young adults with serious mental illnesses and their families across a minimum of two service systems (i.e., mental health, child welfare, juvenile/criminal justice, mental retardation/developmental disabilities, and education). SOCI's mission is to "empower consumers, families, and communities to manage and advocate for their needs and realize their dreams. We accomplish this by partnering with, supporting and educating consumers, families, communities, and professionals."

The SOCI philosophy is based on 12 core values:

- Consumer/Family Focused and Driven
- Safety (Youth, Family and Community)
- Individualized
- Strengths-Based
- Collaboration
- Community-Based/Least Restrictive
- Cultural Competence
- Relentless Advocacy
- Outcome-based
- Cost-Effective/Cost-Responsible
- Education/Vocation
- Physical and Mental Well-being

SOCI consumers live in five communities in or around Pittsburgh. The purpose of this study was to gather qualitative data on the strengths and needs of transition age youth who would be served through a system of care expansion grant in Allegheny County, PA. To inform the expansion, focus groups were conducted with youth aged 18 – 24. Data gathered from these groups provided youth insights on their goals and future, stressors they encounter in their daily lives, who they define as their families, the role of trust in the service process, and what their ideal system of care would look like. In this summary, results will be shared, followed by discussion of how results were used for system change.

Methods

Participants. Participants included 50 males and 41 females who had experienced the mental health service system and who had a wide variety of transition experiences. The young adults ranged in age from 18 to 24 years ($M = 20.17$). Thirty-eight percent were African American, 51% Caucasian, 8% Other/unknown races (8%), and 3% Biracial.

Recruitment. Participants were recruited for focus groups by mental health providers in Allegheny County, through the SOCI Community Connections for Families program, by system partner professional stakeholders, and by posting flyers in various communities. A total of 12 groups were held (six with males; six with females) with 6-12 participants per group. Groups were facilitated at six locations: one group was held in downtown Pittsburgh for youth recruited from all over Allegheny County; one group was held in the Sto Rox SOCI partner community and one group was held in the Wilkinsburg SOCI partner community because both were chosen to implement system of care expansion for this target population; another group was held at a homeless drop-in shelter; one group was held at a mental health community treatment team center; and one group was held at a mental health provider setting for sexual minorities. Participants received a $30 stipend and food.

Facilitation. SOCI contracted with the local Family Health Council, Inc. for focus group facilitation by young adults who were experienced in running focus groups with youth. SOCI staff co-moderated the focus groups.

Focus group questions. SOCI evaluation staff drafted questions with the input from system-of-care stakeholders and youth. The local Family Health Council, Inc. staff also reviewed and modified the questions. In addition to an icebreaker and summary question, there were six main topic areas discussed: youth goals/future; life stressors; the definition of "family;" trust and the service process; and the ideal system of care for transition age youth.

At the beginning of each focus group, participants completed a demographic questionnaire on their gender, age and race. At the conclusion, participants completed an optional survey asking about educational status, employment status, marital status, number of children, living situation, and social service experience.

Results

Although males and females gave some similar answers, there were also several key differences.

Goals and the Future. Males strived for educational achievements, employment goals, and personal goals such as having a family. Females had similar goals for their future, adding that they would like to have their own place to live one day.

Life Stressors. Males discussed many daily events as stressors in their lives including drugs, violence, money, finding a job, broken families, fear of failure, and mental health stigma. Females discussed many of these things, adding domestic abuse, maintaining housing, managing their mental health, and pregnancy/having a child.

Defining Family. Based on discussion with other programs serving this target population and with young adults, SOCI was aware that the term "family" may include more than the traditional nuclear members, therefore, this question was included. Males defined family as their parents, friends, churches, and self. Females added other relatives, their significant others, and social service providers as family.

Trust. Again, informal discussion with other system partners and young adults prompted the need to ask this question about the role of trust in the service process. Males stressed that trust takes time and that often friends and family count the most in the beginning. Females added that they trusted those who were non-judgmental and were loyal to them, and who had integrity. Several mentioned their trust in God.

The Ideal System of Care. Males described a system that was youth-driven and staffed by individuals who really cared. They also noted that they wanted a "one stop shop" where services were always available. Females also noted the need for an open door policy and mentors who had experiences similar to theirs. Females also said that they wanted to see the system offer services for employment, financial aide, housing, time management, physical health care, and money management. Support groups were also key for female participants.

Discussion

The main themes from these groups that were incorporated in system-of-care expansion included the following.

Systems of care must have strong connections to youth. There needs to be youth oversight, staff who reflect youth experiences, and accessibility. This finding was used by SOCI to create a youth support position in each of the two implementing partner communities. These positions are responsible for facilitating community support groups for youth and for mentoring them through the service process. Furthermore, a county-wide youth group called the Youth Outreach Union was created. Youth are also involved in planning a youth support budget and in evaluating the system of care.

Challenges are going to be highly varied from person to person. Those served by the system of care will have a multitude of needs; services/supports must be highly individualized. In addition to their mental health needs, youth enrolling in the system of care have various challenges such as homelessness, lack of insurance, suicidality, physical health needs, daily living skills, educational and job challenges. SOCI's practice model is built upon an individualized service/support process to ensure that these needs are met.

There are multiple transition areas to adulthood. Youth entering the system of care may transition out of child welfare; from primary to secondary education; from school to a job; from dropping out of school to re-enrolling; from homelessness to housing stability; and criminal/juvenile placements to community placements, etc. SOCI has used this information to train staff about the various systems involved in these transitions and for the situations in general.

Mental health issues compound the everyday stress of transition to independent adulthood. SOCI has adopted the recovery model principals to recognize this fact and has established support groups for young adults to help them deal with these situations.

Family is not always defined by blood. SOCI has used this finding to train staff to involve those the youth defines as family in the service/support planning process in the system of care.

Trust takes time. Many youth will need to develop a relationship before being open to receiving many services/supports. SOCI has experienced this first hand. However, the youth support position has greatly helped build trust with young adults in the community.

Moving from a 6-18 year old population to 18-25 year old population brings with it new issues such as teen pregnancy, single parenthood by consumers, domestic violence, transient homelessness, dropping out of school, drug abuse, etc. SOCI has used these findings to provide training and support to staff around such issues so that the system is prepared to respond to consumers who experience them. In conclusion, transition is different for everyone, reinforcing the fact that system of care values—including individualization, cultural competence, youth driven, and strengths based planning—must be adhered to.

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