



# Client Characteristics

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As Predictors of Retention and  
Outcomes in an Australian Residential  
Alcohol and Other Drug (AOD)  
Treatment Program for Adolescents

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# PALM Outcomes

## January 2001-July 2007

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**Retention**, mean (*SD*)

41.38 (29.83)

- Substance use score reduced from 754.1 to 173.65
- Mental health score reduced from 6.56 to 3.47
- Criminal activity reduced from 3.03 to 0.92



# Objective

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- To identify pre-treatment client characteristics that influence retention and outcomes in an Australian residential AOD treatment program for adolescents



# Retention

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- Treatment will not work if not given (Onken, Blaine, & Boren, 1997)
- 30 to 40 per cent of adults leave residential AOD treatment in the first month, 35 to 80 percent do not finish 3 months (Simpson et al., 1997)
- Attrition rates for adolescents are similar, with drop out rates from a high of 66 per cent to a low of 25 per cent of those admitted to treatment



# Retention (Cont)

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- Adequate retention is associated with positive outcomes for most health related problems
- Especially important to AOD treatment yet little is known of the components that contribute to this, especially in adolescents and in an Australia context
- Identifying variables that predict retention would be useful in treatment planning



# Outcomes

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- The available literature contains various measures to define post-treatment outcomes for adolescent AOD treatment however;
- Substance use, psychological functioning and level of criminality are common outcome measures

# Predictors of Retention and Outcomes

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## Retention

- Prior research has found that retention can be predicted by client characteristics such as:
  - Seriousness of drug use, age, dual diagnosis, education, family functioning, number of social supports and delinquency (Palinkas, et al. 1996)

## Outcomes

- Prior research has found no conclusive findings as to what client characteristics predict outcomes however;
  - Substance use severity, criminal involvement and family substance use history appear to be associated with treatment outcomes (Schroder, et al. 2007)



# The Study:

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- To explore the factors influencing retention and outcomes from data available pre-treatment



# Method

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- Analysis of data provided by assessment tools developed by the Ted Noffs Foundation on
- 770 adolescents admitted to one of 5 residential PALM programs between January 2001 and July 2007



# Client Characteristics

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- Pre-treatment assessment provided 52 predictor variables.



# Retention and Outcomes

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- Retention = Length of stay
- Outcomes:
  - Substance Use
  - Mental Health
  - Criminal Activity



# Variables used in Analysis

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- Testing all predictors for correlation with retention and outcomes provided the following variables for use in multivariate analyses



# Retention

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- Age on admission
- Studying full/part-time
- Number of places lived in last three months
- Before PALM coming from detention, hospital or another AOD treatment program
- Opioids as Primary substance
- DSM-IV-TR total score for substance dependence
- Poly-drug use scale score
- Mental Health scale score
- Physical Health scale score
- Ever been suspended or expelled from school
- Number of times in detention
- Number of Arrests in last three months



# Outcomes

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## **Substance use**

- Poly-drug use scale score
- Types of crime committed in last 3 months
  - Social functioning scale score
- Family Assessment Device (FAD) score
  - ODUS Tobacco score
- Number of support people

# Outcomes

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## **Mental Health**

- Social functioning scale score
- How they get along with their family
  - Physical health factor score
  - Mental health factor score
- Before PALM coming from detention, hospital or another AOD treatment program
  - Psychological well-being scale score
    - External motivation
    - Internal motivation

# Outcomes

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## **Criminal activity**

- Types of crime committed in last three months
  - FAD score
- Post traumatic stress diagnostic scale score
  - Number of arrests in last three months
    - Age at admission
    - Studying full/part-time
- Before PALM living in supported accommodation

# Results

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## Retention

- The regression model for the 12 predictors is significant  $F(12) = 4.48, p < .01$
- As a set they explain 6.7% of the variance in retention
- Significant predictors of retention were
  - **Age at admission**
  - **Opioids as primary substance**
  - **Poly-drug use scale score**
- Younger clients left the program earlier as did opiate users and those who used a greater variety of substances

# Substance use

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- As a set predictor variables explain 10.3% of the variance in substance use at follow-up,  $F(6) = 3.89, p < .01$
- The only significant predictor of substance use post-PALM was the number of support people an adolescent has
- The more support the less substance used



# Mental health

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- As a set predictors explain 19% of the variance in the mental health outcomes
- Coming from detention, hospital or another AOD program before PALM significantly predicated poorer mental health concerns post-PALM



# Criminal Activity

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- As a set predictors 7 predictors explain 20.8% of the variance in criminal activity post-PALM
- Number of arrests in the 3 months prior to the pre-treatment assessment and age on admission were the only significant predictors



# Conclusions

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- Client characteristics are not strong predictors of retention or outcomes however results highlight important indicators
- Other variables, not a focus of this study, explain most of the variance in retention and outcomes
- Future research into these areas would be beneficial

# References

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