



# LANGSTON UNIVERSITY

**Rehabilitation Research and Training Center (RRTC)  
on Research and Capacity Building for Minority Entities**

## **Title: Latino with Substance Use Disorders: Vocational Outcome Analysis & Comparison**

Presenters: Belinda Rivas, Antonio Aguirre, Abdoulaye Diallo,  
Carl Flowers and Ngai Kwan  
LU-RRTC State-of-the-Science Conference  
September 28-29, 2017  
Atlanta Georgia



# Presentation Objectives

- + The purpose of this study was to explore demographic characteristics, vocational rehabilitation services, and vocational rehabilitation outcomes of Latino clients with substance use disorders receiving vocational rehabilitation services in the United States.



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# BACKGROUND – Minority Disparities

- + Employment Gap for Minorities with Disabilities
- + Latinos with Substance Use Disorders
- + Underrepresentation of Latinos in VR System
  - + Lower Acceptance Rates
  - + Lower Retention Rates
  - + Disparity in Services
  - + Less than Ideal Outcomes



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# VR Consumers with SUDs

- + Less Likely to be Employed at Time of Application
- + Inconsistent Fragmented Employment
- + Multiple Complex Conditions
- + Prevalence of SUDs and Alcoholism
- + High Rates of Use in Latino Pop.



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# Significance of Study

- + **Latinos Fastest Growing Minority Group**
- + **Latinos at High Risk for Alcohol Use & SUDs due to SES**
- + **Latinos High Risk for other Health Conditions**
  - + **High blood pressure, diabetes, obesity, and liver disease due to lower social economic status, cultural and dietary influences**
- + **Co-morbid Conditions Common**
- + **SUDs and other disabling conditions**



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# STUDY OBJECTIVES

- + The purpose of the study was to examine the effects of demographic characteristics, vocational rehabilitation service patterns that are likely to contribute to successful competitive employment outcomes, and quality of employment outcomes within the state-federal vocational rehabilitation system for Latino with substance use disorders.



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# STUDY OBJECTIVES

- + The two research questions guiding the study include:
  - + (1) What are the consumer characteristics that contribute to employment outcomes?
  - + (2) Which VR services contribute to successful employment outcomes?



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# METHOD

- + Analysis of RSA –R911 data for the years FY 2009- 2013
- + STATA statistical package
- + Chi-square statistics Logistic & Regression Analysis
- + Examine the association among demographic characteristics and vocational rehabilitation services related to successful outcomes



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# METHOD - Sample

- + Latino consumers in the Public VR System
- + RSA-911 National Consumer Data Set
- + FY 2009-2013
- + Population Consists of the Total Number of Consumers From all State Agencies
- + Sample Limited to Latinos with Primary or Secondary SUD
- + Consumers Receiving Services



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# METHOD (Participants)

- + 29, 082 of the participants applied for VR services; 5, 374 were excluded in the analysis due ineligibility of VR service.
- + 17, 091 (72%), of the remaining 23, 708, received unsuccessful closures such as: before determination, before eligibility, after eligibility, before services were initiated, after eligibility from order selection, after eligibility, before IPE.
- + The remaining 6,617 (28%) individuals were closed successfully upon achieving employment outcome.



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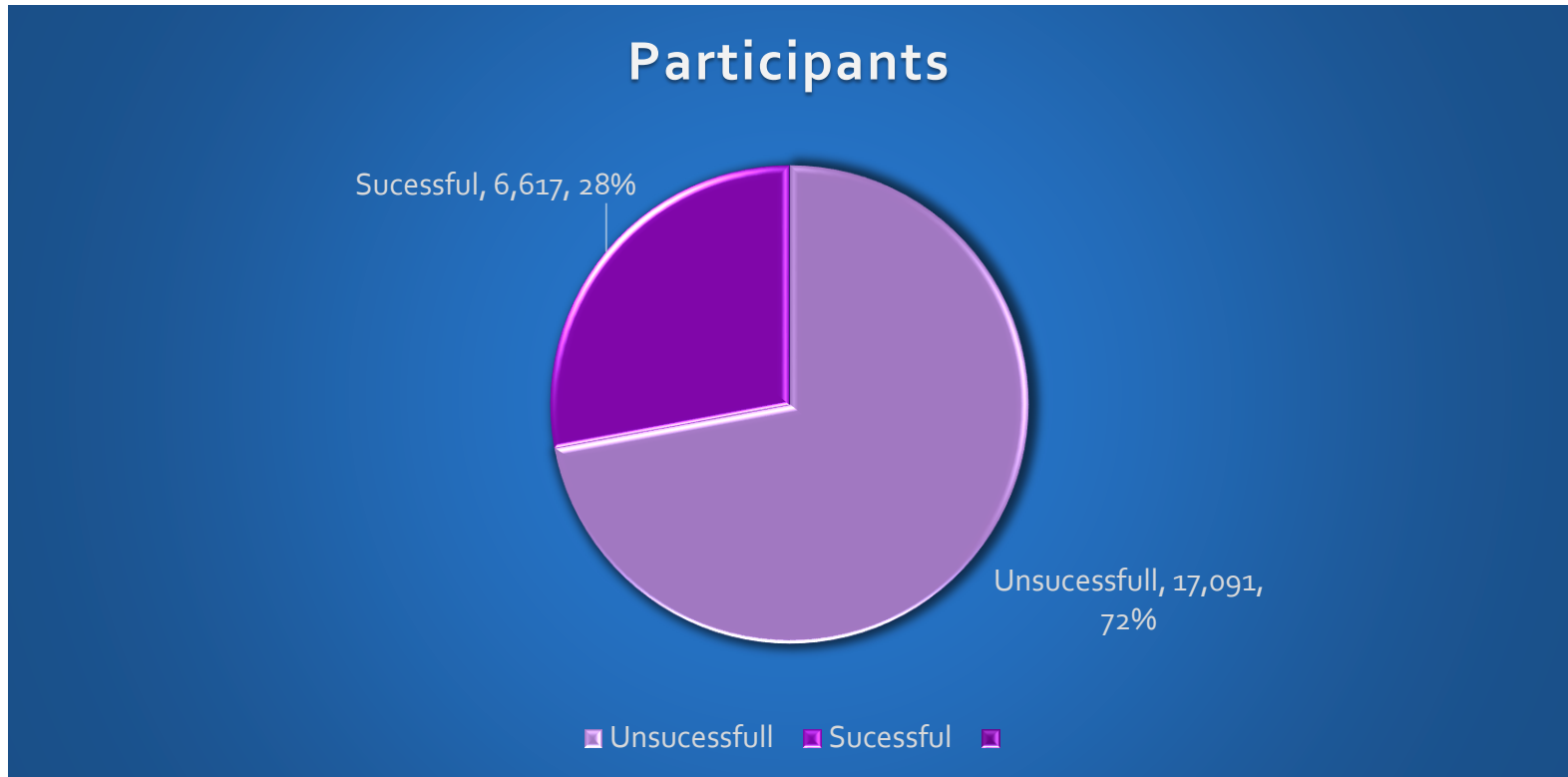
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# METHOD – Pie Chart



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# METHOD (Outcome Variables)

## + Dependent Variable

### + Competitive Employment Outcome

As defined by the RSA-911 consumers who have achieved successful competitive employment need to have been employed for at least 90 days in an competitive integrated employment setting or self-employed.

Unsuccessful outcome refers to clients not working after completing their planned vocational rehabilitation program. Types of employment industry include successful closure, self-employment, volunteer, and competitive employment.



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# METHOD (Predictor Variables)

## + Independent Variable:

### Demographics & Vocational Rehabilitation Services

#### + Demographic Variables (Table 1) Include:

gender (male and female), age, level of education (special education, less than high school, high school graduate, associate degree, and college degree), Insurance (Medicaid, Medicare, Private, other) and benefits (SSI, SSDI, TANF, Veterans, Disability Benefits, General Assistance, Public Support or other)



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# METHOD (Predictor Variables)

## + Independent Variable:

### Demographics & Vocational Rehabilitation Services

## + Vocational Rehabilitation Services Variables (Table 2-Y= received service and N= did not receive service) Include:

(assessment services, diagnosis and treatment services, rehabilitation counseling and guidance services, college or university services, on-the-job training services, miscellaneous training services, job search assistance, job search services, job placement services, transportation services, maintenance services, information and referral services)



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# METHOD (DATA ANALYSIS)

- + Latinos with Primary or Secondary SUD
- + Extracted from the RSA 911 Databank
- + Statistical Package STATA
- + Descriptive Statistics for Sample Characteristics
  - + Demographic variables descriptive statistics
- + Logistic regression analysis
  - + Examine the association among demographic characteristics and vocational rehabilitation services successful employment outcomes



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# HIGHLIGHTED RESULTS

## + Descriptive Statistics

### + Table 1 Demographic characteristics and employment rates

- + Overall sample employment success rate was 28% & unsuccessful rate was 72%
- + Males (28 %) had successful employment outcomes
- + Female had (26 %) (p value was significant at 0.003 below the .05 level)
- + Transition age youth (15-24) and elderly (65+) had lower rates of successful employment outcomes compared to adults (25-64) (P value was significant at .000 below the .05)
- + BS or Higher over 40% were able to achieve employment outcomes. (P=0.000).
- + Uninsured versus insured at time of application higher rate of employment (P value) = 0.000



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# HIGHLIGHTED RESULTS

## + Multivariate Regression Analysis

### + Table 2 Association among Demographic Characteristics and Vocational Rehabilitation Services Related to Criterion Variable Successful Employment Outcomes

- + Male clients are more likely to achieve successful employment outcomes with odds ratios of 1.25 for males and 1.00 for females. Male clients expected odds of employment are 25% likelier than those of female clients.
- + Transition age youth are less likely to achieve successful employment outcomes with an odds ratio of 0.844 when compared to adults aged 24-64



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# HIGHLIGHTED RESULTS

## + Table 2 Association among Demographic Characteristics and Vocational Rehabilitation Services Related to Criterion Variable Successful Employment Outcomes (Cont.)

- + Clients with no education or limited education were less likely to achieve successful employment outcomes than clients with high school diplomas
- + Clients with an elementary education or no education had expected odds of employment 18% lower than those with at least a high school diploma and for those with just some high school or special education experience successful employment odds were significantly lower at 25%
- + Those individuals with bachelor degrees or advanced degrees had almost 60% higher expected odds of employment than clients with high school degrees



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# DISCUSSION

- + Study Explored Two Sets of Variable
  - + consumer characteristics and vocational rehabilitation services
- + Data analysis was used to identify and understand the relationship between consumer characteristics and types of services and vocational rehabilitation employment outcomes for consumers with primary or secondary SUD's
- + Results of this study reveal that there are consumer characteristics that may affect successful employment outcomes and that there are services that increase likelihood for successful employment outcomes



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# DISCUSSION - CHARACTERISTICS

- + Latino Males likelier to have Positive Employment Outcomes
  - + Gender Roles, Cultural Machismo, Gender Employment Inequalities
  - + Latinos ages 25 to 64 Significantly higher rates of successful employment outcomes in comparison to older or younger Latino consumers
    - + Consistent with findings found in other groups, Middle Adulthood Primary age for work, Older adults have more work experience and training, Latino demographic very young (Median age of 19 for US born)
  - + Latinos with higher the levels of education are positively correlated with successful employment outcomes
    - + Latino minority has lowest educational attainment than any other minority group



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# DISCUSSION -SERVICES RECEIVED

- + Findings Consistent with other Studies
  - + Regarding affect of VR Services
- + Latinos receiving college/university services higher odds of Successful Employment
  - + The need for educational services for Latinos that traditionally experience low rates educational attainment
- + Training services and Job placement significantly increase likelihood for positive employment outcomes
- + While results are similar with other VR consumer demographics
  - + Appropriate and timely VR services for young Latinos consumers appears to be essential for positive employment outcomes



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# IMPLICATIONS

- + Importance of Appropriate VR Services for Latinos with SUDs
  - + Lead to successful employment outcomes
  - + Assessment & Diagnostic services, transportation, job placement, job training, and maintenances services more likely to have positive employment outcomes
- + Consumer characteristics may place consumers at risk for poorer employment outcomes
  - + Latina females are at greater risk
  - + Younger and older Latinos at greater risk
- + VR Counselors must be aware of the risk and special needs of their Latino clients
- + Need for more research concerning this large and quickly growing demographic



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# RECOMMENDATIONS

- + The results warrant special consideration to be given to the Latino demographic
- + Counselors need to use best practices considering the unique service needs of the population served and subgroups.
- + State VR Providers should consider educational training for providers regarding unique needs of Latino consumers
- + Training should ensure that services are offered equally to all consumers regardless of ethnicity or disability type



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# Additional Resources & Information

- + Wisconsin and Illinois Incorporated Latino Initiatives
  - + Expand and Improve VR Services for Latinos
  - + Illinois for their part have identified the need for specialized services to a very young demographic and implications for the future
  - + Underutilization of VR services by Latinos
  - + Wisconsin has identified distinct needs of Latino consumers; including supportive Job Creation; Benefits Planning; College Support; Customized Employment; and Supportive Employment



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# LIMITATIONS

- + **Classification of Hispanic Individuals within RSA 911 Database**
  - + **Within Group Differences**
  - + **Very large demographic**
  - + **Includes many different ethnicities and cultural backgrounds**
  - + **Nationalities, time lived in the US, acculturation levels, immigration status**



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# FUNDING AGENCY ACKNOWLEDGEMENT

The contents of this presentation were developed under a grant from the National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR grant number 90RT5024-01-00). NIDILRR is a Center within the Administration for Community Living (ACL), Department of Health and Human Services (HHS). The contents of this presentation do not necessarily represent the policy of NIDILRR, ACL, HHS, and you should not assume endorsement by the Federal Government.



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