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**SSDI Beneficiaries with Visual Impairments in Vocational Rehabilitation:  
Demographic, Socioeconomic, and Disability Influences on Employment**

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### Abstract

**Introduction:** Given mutual concerns of VR and SSA, our purpose was to evaluate the impacts of individual and economic climate factors on competitive employment of SSDI-beneficiary consumers with visual impairments in VR.

**Methods:** Using FY 2010 RSA-911 data on 4,478 consumers who received SSDI, closed after receiving services, we conducted descriptive and multilevel analyses to determine what client and state/agency factors predicted competitive employment.

**Results:** Unemployment rate, gender, age, race, disability, severity of visual impairment, education, prior earnings, SSDI amount, and interactive effects of agency structure were significantly related to competitive employment.

**Discussion:** This research provided new knowledge of state/agency influences, risk factors, advantages and compensatory effects of services in blind agencies, and underscored the importance of prior work experience in achieving competitive employment for SSDI-beneficiary consumers.

**Implications for practitioners:** We make recommendation related to VR services to SSDI beneficiaries, policy regarding agency structure, and future research.

SSDI Beneficiaries with Visual Impairments in Vocational Rehabilitation:  
Demographic, Socioeconomic, and Disability Influences on Employment

Cost for the U.S. Social Security Administration (SSA) program is the single largest expenditure in the federal budget, and outlays for Disability Insurance (SSDI) and Supplemental Security Income (SSI) are significant components (U.S. Office of Management and Budget [OMB], 2012; SSA, 2012b). Many SSA beneficiaries are consumers in state-federal Vocational Rehabilitation (VR), but information is sparse about influences on their employment outcomes. In view of the considerable annual costs for SSI and SSDI outlays, there would be substantial benefits to SSA, VR, and to individual VR consumers from greater understanding of factors that contribute to improved employment outcomes for SSDI beneficiaries who are blind or visually impaired (BVI). Investigation of the employment outcomes for this population is the focus of this study.

### **SSA and VR**

Outlays for SSDI and SSI benefits were approximately \$200 billion in 2011, and costs are increasing (SSA, 2012b). In the same year, approximately \$3 billion was available to VR agencies to provide a variety of services for people with disabilities to prepare for, obtain, or retain employment (RSA Grants and Funding, 2011). VR serves a significant portion of SSA beneficiaries. Of about 600,000 closed annually, over 25% of those completing VR are SSI or SSDI beneficiaries. In FY 2011, for example, about 28% percent of all closures were SSA beneficiaries at application; over half of these were SSDI recipients (Giesen, 2012).

A large portion of VR consumers who are BVI are SSI or SSDI beneficiaries. Based on FY 2011 VR data, approximately 23% of those with some visual impairment and 56% of those legally blind were SSI or SSDI beneficiaries at application for VR, and 34% of those legally blind were SSDI beneficiaries. Thus, about one third—a significant fraction—of the VR consumers who were legally blind were SSDI recipients (Giesen, 2012). Consequently, in

addition to the interest of VR in improving outcomes for all consumers, SSA has a substantial ongoing interest in the success of VR agencies in achieving employment for SSA recipient consumers, including individuals who are visually impaired (VI).

### **Previous Research**

**General Disabilities—SSI and SSDI.** A number of investigations have examined correlates or predictors of employment outcomes after VR for SSI-SSDI combined and SSI-only beneficiary populations of all disability types (e.g., Hennessey & Muller, 1995; Rogers, Bishop, & Crystal, 2005), including focus on transition-age youths (Berry & Caplan, 2010). Generally, advantage factors were white, male, more education, greater family income, better health, receiving SSDI (versus SSI); services of physical therapy, vocational training, general education, job placement, restoration, and college training. However, Barry and Caplan found some paradoxical and inconsistent effects (e.g., disadvantages for college and job placement) when examining employment after 2 years.

**Agency-level outcomes.** A few studies including all disability types have examined aggregate VR agency-level outcome measures rather than individual outcomes (U.S. GAO, 2007a; 2007b). The 2007b study focused on state-agency outcomes (e.g., average earnings, departures from SSI rolls). Economic, demographic, and agency factors (e.g., unemployment rate, state per capita income, population size) were important in accounting for state agency differences in outcomes. Also, aggregate characteristics of agency clientele (e.g., percentage female, visually impaired, mental/cognitive impaired, SSA proportion served), and some agency practices were associated with better agency-level employment outcomes.

These findings may not have applicability to outcomes for individual VR consumers who are BVI and SSDI beneficiaries because of the *aggregation fallacy* (e.g., Robinson, 1950). Because of this fallacy, we cannot be sure that agency-level relationships (e.g., agency percent of cognitively impaired served is negatively related to agency percent of successful closures) will translate to analogous individual-level relationships (e.g., presence of cognitive impairment is related to an individual consumer's likelihood of successful closure), and vice versa. Further,

combined disability studies violate *specificity in disability research* further threatening generalizability to any specific disability group (Cavanaugh, Giesen, & Steinman, 2006; Giesen & Cavanaugh, 2008).

**General Disabilities-SSDI Only.** Whereas SSA monitors work trends for SSI recipients (SSA, 2007), little parallel data existed for working SSDI beneficiaries until Kennedy and Olney (2006). They reported factors associated with self-reported, mostly part-time workforce participation of SSDI recipients: younger, male, white, more income, better health, less severe disability, not married, higher SES, college education, lack of health insurance, lack of mobility limitations, presence of developmental disabilities, and Northeastern or Midwestern region of residence.

**Disability-specific research.**

***VR outcomes for adults with visual impairments.*** Findings for individual-level employment outcomes of adult consumers who are BVI are based on a series of investigations spanning more than three decades, summarized by Giesen and Cavanaugh (2012). Demographic, disability, socioeconomic, work-history, and services factors influence employment outcomes in generally expected ways. Receipt of SSA benefits (SSDI, SSI) generally has been a risk (negative) factor.

Regarding agency-level factors, a series of studies of VR agencies serving consumers who are BVI (e.g., Cavanaugh, Giesen, & Pierce, 2000) provided documentation and replication (Cavanaugh, 2010) of differences in consumer characteristics and employment outcomes associated with agency structure. In general, separate blindness agencies produce more positive employment outcomes than general/combined agencies even though the separate agencies serve a more “workforce-disadvantaged” clientele.

***Employment for youths with visual impairments.*** In addition, recent studies have focused on transition-age youths. Giesen and Cavanaugh (2012) found, consistent with other research, that evidence of early work experience was a strong predictor of competitive employment. Also, there was a negative influence for SSI receipt, but SSDI was not significant.

These and other findings from McDonnall (2011) suggest that early-age SSI receipt may be a disincentive to acquire early work experiences, thus indirectly hindering subsequent employment.

### **Study Objectives**

Given the importance of improving the effectiveness of the VR program for SSA participants, including SSDI beneficiaries who are BVI, our research had several objectives. First was to investigate influences on competitive employment. These influences were at the individual level (demographic, socioeconomic, and disability factors) and at the state/agency level (economic and structure factors). A second objective was to consider these influences at the same time; we used multilevel modeling to do this. Our study is unique in this regard. A third objective was to explore interaction of individual and agency factors (termed moderation or cross-level interaction). Knowledge of these potential influences, risk factors, and interactions of agency and individual factors can be used to identify which consumers in what contexts may need special attention to facilitate achieving competitive employment.

## **Method**

### **Data Source**

Data were from the FY 2010 RSA Case Service Report (RSA-911), which provides demographic, socioeconomic, and disability information at referral, and service and outcome information for all cases closed during the fiscal year. We selected consumers closed in VR who were legally blind or had other visual impairments, were SSDI beneficiaries at application, who received services (with or without an employment outcome), and whose age at application was 18 to 75 as the initial analysis population for this fiscal year ( $N = 4,478$ ).

Examining the distribution, we found that for age at application 65-75, 160 consumers were served across 41 agencies. This 65-75 age cohort may include disabled workers and

widow(er)s at full retirement age (FRA) coded as SSDI rather than "Other Public Support" (includes retirement benefits). Note that when individuals receiving SSDI reach FRA, their benefits are called retirement benefits rather than disability benefits, and they will not have any limit on earnings. FRA applies only to workers and widow(er)s. There is no age limit for adult children receiving SSDI—an individual 18 or older whose disability began before age 22 and who is paid on a parent's SS earnings record (SSA, 2012a).

*Characteristics of sample.* Average age at application was 46.21 ( $s = 11.54$ ), and 47.2% were female. For race/ethnicity, 64.6% were White, 25.1% African American, 0.4% American Indian, 0.9% Asian American, 0.3% Hawaiian or Pacific Islander, 7.8% Hispanic of any race, and 0.9% multiple race. For disabilities, 73.2% were blind (vs. VI, not legally blind), 2.5% had a cognitive secondary disability, 40.7% noncognitive secondary disability. For earnings and supports, 25.1% had weekly earnings at application ( $M = \$72$ ,  $s = \$184$ ), 13.0% also received SSI, and for monthly SSDI,  $M = \$903$  ( $s = \$417$ ).

### **Analysis Variables**

*Competitive employment criterion measure.* Our dichotomous indicator of competitive employment was coded (1) for a competitive employment outcome, and (0) for a noncompetitive employment outcome or unsuccessful closures after VR services. Competitive employment included employment in an integrated setting, self-employment, Business Enterprise Program (BEP), and supported employment in an integrated setting; and was full or part-time, and compensated at the maximum of the State or Federal minimum wage (RSA Case Service Report, 2008). Noncompetitive employment included homemaker, unpaid family worker, or when the above income criterion was not met, and for *unsuccessful* closures—those closed *after services* in

extended employment and those *not employed after services*—exited without an employment outcome, after services.

Table 1

*Summary of Outcome Predictors*

Variable	Description
<b>Individual Level</b>	
Gender	Indicator; female = 1
Age at application	Age at time of VR application
Race/ethnicity	Indicators for White (reference), African American, American Indian, Asian, Hawaiian or Pacific Islander, Hispanic of any race, multiple race/ethnicity
Cognitive secondary disability	Indicator for presence
Noncognitive secondary disability	Indicator for presence
Legal blindness	Indicator for legal blindness (1) versus visual impairment, not legally blind (0)
Education level at application	Coded from 0 (No formal schooling) to 8 (Master's degree or higher)
Earnings at application	Weekly earnings at VR application
SSDI at application	Monthly SSDI amount at application
SSI recipient	Indicator of receipt at application
<b>State/Agency Level</b>	
State population	State population in millions
Unemployment rate	Percent of persons unemployed in each state
Per capita income	Average per capita income of persons in each state
Agency structure <sup>a</sup>	Indicator for type of VR agency structure: (1) blind - serving blind or VI consumers versus (0) combined or general agencies

*Note.* <sup>a</sup>Combined agencies serve all disabilities. In separate agency states, the general agency serves mostly consumers with disabilities other than visual impairments.

**Individual-level predictors.** These are summarized in Table 1 within hierarchical levels, and included demographic factors (gender, age, race), disability factors, and socioeconomic and work-related factors (education, earnings at application, SSDI income, receipt of SSI). Weekly earnings at application was found to be a good measure to reflect prior work experience and avoid multicollinearity with SSDI and SSI measures.

**State/Agency-level predictors.** State population and state per capita income were obtained from the U.S. Census Bureau (2010a, 2010b), state unemployment rates, from the U.S. Department of Labor, Bureau of Labor Statistics (2011). Agency structure (blind versus combined or general) was available in the RSA-911. These four state/agency-level measures comprised the second level in the multilevel linear model described below.

### **Analyses**

A two-level hierarchical generalized linear model (HGLM) was employed because we had predictors at both individual consumer and state/agency levels, and the criterion measure (competitive employment) was dichotomous. Analyses were conducted with HLM7 7.0 (Raudenbush, Bryk, & Cogdon, 2010) using the logit link function and full PQL estimation.

A sequential variable entry approach was taken following the recommendations of Heck, Thomas, and Tabata (2012). First, an unconditional two-level model was calculated. We then entered the four state/agency level predictors of the intercept to examine if these measures could account for some of the variation in odds of employment between agencies. Next, each level 1 (consumer) predictor was entered individually. (All continuous predictors at either level were centered at their grand mean.) Thus, each consumer predictor was assessed to see if agency-level predictors affected slopes (cross-level interaction) and whether a random slope subsequently was significant. If there were no significant cross-level effects, the agency-level predictors were

dropped, retaining only the slope for each consumer-level predictor, regardless of significance. If any agency-level predictor had a significant influence, all were retained for that particular consumer-level predictor slope. Multicollinearity was checked among all predictors, and no difficulties were present.

## **Results and Discussion**

### **Descriptive Statistics**

Univariate statistics for predictors by outcome categories are shown in Table 2. Females were somewhat less prevalent in the competitive group (45% vs. 49%). Noncognitive disabilities were markedly lower in the competitive group (34% vs. 46%). Earnings at application were about seven times higher in the competitive group whereas SSDI income was only about 11% higher. 10% were SSI beneficiaries in the competitive group (vs. 16%). Other differences were minimal.

The base competitive employment rate was 42.7% and may be compared with a 51% overall rate which also includes cases not receiving SSDI. The 42.7% rate may appear high because previous research often considered SSI participants combined with SSDI participants and mostly included all disability types. This *noncomparability of samples* may have led to dubious expectations regarding the work potential of SSDI beneficiaries who are BVI.

Table 2

*Descriptive Statistics for Individual-Level Predictors by Outcome Group*

Measure	Outcome Groups	
	Noncompetitive & Unsuccessful <i>n</i> = 2576	Competitive <i>n</i> = 1920
Gender (female)	0.491	0.447
	0.010	0.011
Age (mean)	46.170	46.257
	0.230	0.259
White	0.637	0.658
	0.009	0.011
African American	0.259	0.240
	0.009	0.010
American Indian	0.006	0.002
	0.002	0.001
Asian	0.011	0.006
	0.002	0.002
Hawaiian or Pacific Islander	0.004	0.002
	0.001	0.001
Hispanic of any race	0.078	0.078
	0.005	0.006
Multi-race	0.005	0.014
	0.001	0.003
Cognitive secondary disability	0.026	0.023
	0.003	0.003
Noncognitive secondary disability	0.458	0.339
	0.010	0.011
Legal blindness	0.736	0.725
	0.009	0.010
Education level (mean)	4.562	5.013
	0.031	0.037
Weekly earnings (mean)	\$20.69	\$139.77
	\$1.80	\$5.60
SSDI income (mean)	\$864.19	\$955.66
	\$7.92	\$9.83
SSI recipient	0.162	0.095
	0.007	0.007

*Note.* Values adjacent to each measure are proportions or means. *SE* is given below for each. All measures are at application.

### Competitive Employment Model

Significant results for the hierarchical logistic regression model are given in the text. Estimates are from the unit-specific model with robust standard errors.

**Unconditional model.** The unconditional (no predictors) 2 level model yielded a significant intercept with odds of competitive employment  $OR = 0.794$ ,  $p = .006$ , indicating SSDI consumers have about 21% lower odds of competitive employment than noncompetitive employment within an average agency. This corresponds to baseline probability of competitive employment of .44. The level-2 (agency-level) estimated intercept variance component (0.2859),  $\chi^2(70) = 377.17$ ,  $p < .001$ , indicated that there was significant variability in likelihood of competitive closure across agencies and supported our development of a multilevel model. Per Heck, Thomas, and Tabata (2012), the intra-agency (intraclass) correlation indicated 8.00% of the variance in odds of competitive employment lies between agencies.

**Final model.** In addition to reporting test statistics and odds ratios (ORs), we also obtained Cohen's  $d$  effect size measures from ORs (Chenn, 2000). This enabled use of the standard effect size benchmarks for  $d = 0.2$ , 0.5, and 0.8 for small, moderate, and large effects, respectively. This was important because of hypersensitivity due to the large  $N$ . Also, per recommendation of Hosmer and Lemeshow (2000, p. 64), we adjusted the ORs for some continuous predictors so that they were based on more meaningful units of change (e.g., 5-year rather than 1-year increments for age at application).

There was an overall effect for state unemployment rate (indicated on the overall intercept). Increased state unemployment rate hindered the likelihood of competitive employment,  $t(65) = -2.10$ ,  $p = .04$ ,  $OR = .89$ ,  $d = .07$ . For a 1% increase in state unemployment rate, the odds of competitive employment decreased by 11%.

*Gender.* Although there was no simple gender effect, there was a substantial cross-level interaction with state population such that females, relative to males, had declining odds of competitive employment as state population (in millions) increased,  $t(4304) = -3.86, p < .0001, OR = 0.957, d = .024$ . To further explore the possible moderating role of agency structure in this interaction, we included a level-2 population by agency structure interaction term in the model as another modifier of the gender-competitive employment relationship and found significant results,  $t(4304) = 2.56, p = .01, OR = 1.034, d = .019$ . The pattern of the complex interaction was that odds of competitive employment increased for males but decreased for females with increased state population. In addition, within these trends, both males and females served in blind agencies tended to do better than those served in combined or general agencies.

These benefits of services in blind agencies is consistent with previous research with adult consumers with visual impairments (e.g., Cavanaugh, 2010; Cavanaugh, Giesen, & Pierce, 2000). It may be that agencies in larger states inadvertently put more emphasis on male clients because they serve more male SSDI clients, but services to females in blind agencies in larger states can lessen the negative impact of being served in a larger state. However, we examined gender proportions with increasing state size and between agency structure types and found no gender imbalances.

*Age at application.* Greater age at time of VR application was associated with declining odds of competitive employment,  $t(4304) = -3.02, p = .003, OR = 0.929$  (adjusted to 5-year increments),  $d = .041$ . Additionally, agency structure and unemployment rate mitigated the decline with age. We included a level-2 unemployment rate by agency structure interaction term and found significant results,  $t(4304) = -2.04, p = .04, OR = 0.970, d = .017$ , and cross-level interaction for agency structure,  $t(4304) = 2.47, p = .014, OR = 1.082, d = .044$ . For younger

applicants higher competitive closure was associated with lower unemployment rate. As age at application increased to its mean and older, the blind agency group had higher competitive rate, whereas the combined/general agency group had declined, and differences due to unemployment rate had disappeared.

Because agency structure seemed to have the most impact in the interaction, we further investigated the age at application by agency structure interaction by graphical means. We aggregated the level-1 data to obtain a mean competitive employment rate by both yearly age at application and agency structure. A scatterplot of mean competitive rate versus age at application was constructed, subgrouped by agency structure (see Figure 1). Application of the Loess smoothing function fit method (using IBM SPSS version 20) to the agency type subgroups showed a trend for higher level and sustained higher rate of competitive employment past age 60 for consumers served in blind agencies. In contrast, the pattern for those served in general/combined agencies was somewhat lower and tended to drop off sharply past age 60.

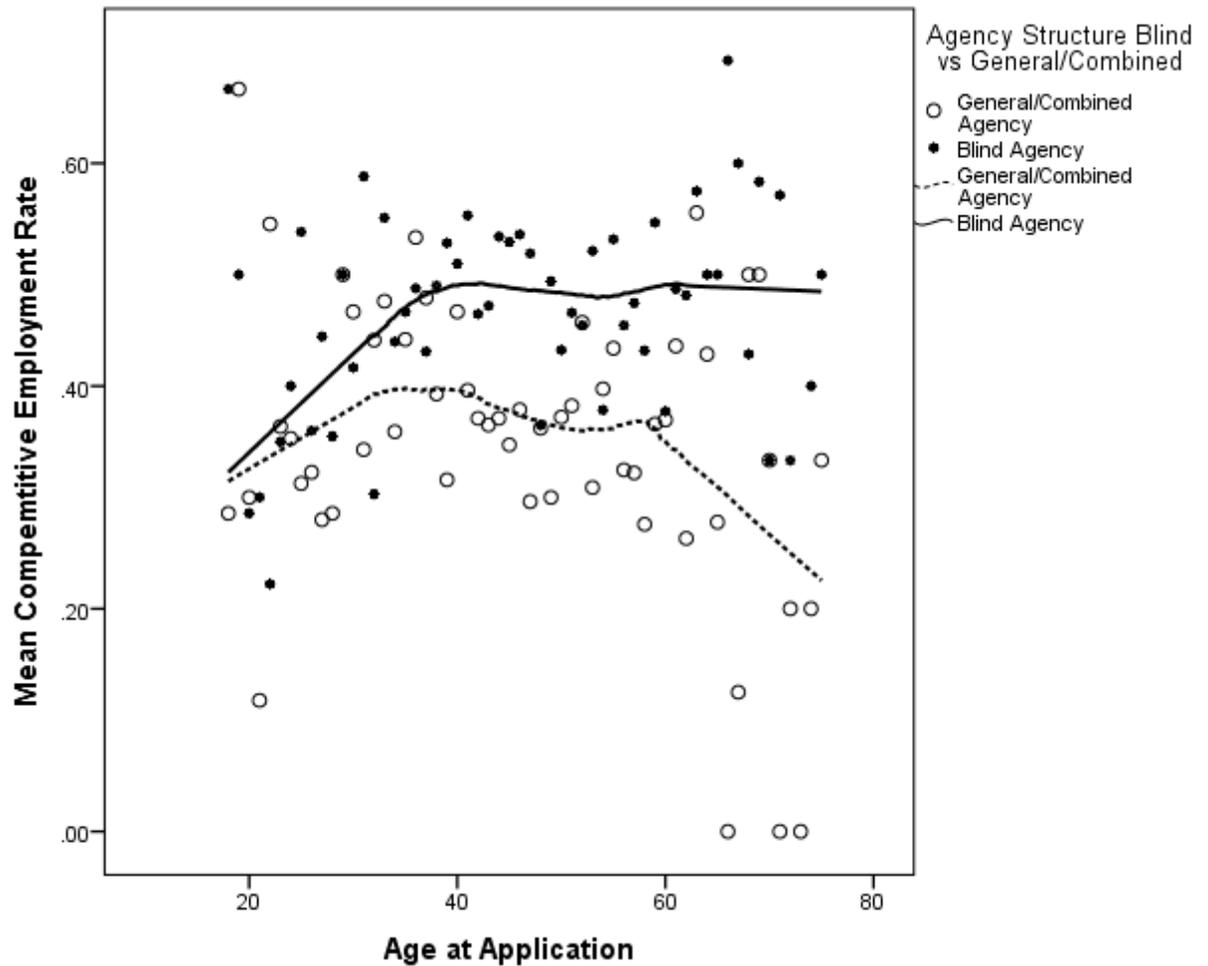


Figure 1. Trends in competitive employment rate by age and type of agency structure

To summarize, there was a general decline in competitive employment odds as age at application increased. However, this trend was influenced mildly by unemployment rate and more strongly by agency structure in an interactive manner. SSDI recipient consumers who applied for services in approximately their mid-thirties or older appear more likely to achieve competitive employment when served in blind agencies, and the higher likelihood seems to be maintained through older ages. In contrast, those served in combined/general agencies showed lower and declining rates of competitive employment during the same age periods.

This is a new and important finding that provides more specific support for the improved outcomes associated with services in blind agencies. Although other speculations are possible—such as possible deemphasis on older blind consumers in combined or general agencies—reasons are unclear without further investigation.

*Race and ethnicity.* Asian consumers had lower odds of competitive employment compared to Whites overall,  $t(4304) = -2.48$ ,  $p = .013$ ,  $OR = 0.314$ ,  $d = .640$ , but there was a strong cross-level interaction with agency structure,  $t(4304) = 2.11$ ,  $p = .035$ ,  $OR = 4.70$ ,  $d = .855$ . Asian consumers served in blind agencies had much higher odds of competitive employment than when served in combined or general agencies. This parallels findings of higher acceptance rate for Asian consumers (e.g., Cavanaugh, Giesen, & Steinman, 2006). Specifically why Asians would do better in blind agencies is unclear but partially adds to evidence of the heightened effectiveness of blind agencies.

There were no differences from Whites in odds of competitive employment for African American ( $p = .95$ ), Hispanic ( $p = .98$ ), or multi-race ( $p = .19$ ) SSDI recipient consumers. There were insufficient numbers ( $< 20$ ) of both Native Hawaiian or Pacific Islander, and American Indian or Alaskan Native consumers for inclusion in the analysis.

Considering the high sensitivity of our analysis from our large sample size, we were confident that there were not undetected employment outcome decrements for African American SSDI consumers. This is generally inconsistent with much previous research. However, Hispanics fairing as well as (or better than) Whites is consistent with some recent research (e.g., Giesen & Cavanaugh, 2012). It may be that the prior work experience possessed by most SSDI beneficiaries has a leveling effect on employment outcomes for different race/ethnicity groups.

*Secondary disabilities.* Consumers with a noncognitive secondary disability had substantially lower odds of competitive employment than those without a secondary disability,  $t(4304) = -3.78, p = .001, OR = 0.693, d = .203$ . This negative effect was enhanced slightly when state per capital income increased,  $t(4304) = -2.34, p = .02, OR = 0.965$  (per \$1000),  $d = .020$ . There was no effect for the presence of a cognitive disability ( $p = .40$ ).

An additional disability adds to overall disability severity, which threatens employment, and the effect is accentuated with higher unemployment, in part due to increased competition for existing jobs and greater job readiness challenges for VR counselors.

*Level of visual impairment.* The odds of competitive employment for a consumer who was legally blind were 24.6% lower than for a consumer who was visually impaired, not legally blind,  $t(4304) = -2.22, p = .027, OR = 0.764, d = .148$ . This difference was not influenced by any of the state/agency-level factors. Severity of visual impairment also adds to overall disability severity and consistently has been found to hinder competitive employment.

*Socioeconomic factors.* Odds of competitive employment were enhanced for consumers with a higher level of education,  $t(4304) = 8.93, p = .001, OR = 1.17, d = .087$ , and for those with more weekly earnings at application,  $t(69^*) = 12.20$  [\*due to random slope],  $p = .001, OR = 1.42$  (per \$50 increments),  $d = .193$ , and those receiving a greater monthly SSDI payment at application,  $t(4304) = 2.30, p = .021, OR = 1.048$  (per \$200 increments),  $d = .026$ . Also, odds of competitive employment tended to be reduced ( $p = .07$ ) for those also receiving SSI at application.

More education typically has been found to increase chances for employment. Earnings at application and amount of SSDI are both indicative of employment, present and past. The key seems to be that previous work experience is a strong indicator for future employment. In

addition to findings from adults and transition-age youths with visual impairments (see Giesen & Cavanaugh, 2012 for a review), there is well-established evidence from cross-disability research involving youths (e.g., Stodden, Dowrick, Gilmore, & Galloway, 2001) that supports the importance of work experience for subsequent employment. Most of our study population had sufficient work quarters to qualify as SSDI participants, and their payments reflect the duration and/or level of previous work. (Only about 10% of all SSDI recipients are disabled adult children or disabled widow(er)s, who may not have work experience [SSA, 2012a].) Given the vast majority have work experience, it is not surprising that this population has a reasonable base rate of competitive employment and that our indicators of current and previous work experience are positive predictors for competitive employment. In contrast, the marginally significant trend for additional SSI receipt was a negative factor—not surprising considering receiving both SSDI and SSI is an unusual, poorly understood combination and worthy of further research. The combination may indicate advanced age, additional disability, and/or limited income or resources. Generally, SSDI and SSI appear to have opposite influences on employment outcomes.

### **Conclusions and Recommendations**

This study focused on factors impacting the competitive employment outcomes of a national population of SSDI beneficiaries in VR who were blind or visually impaired. We examined predictive factors at the individual- and state/agency-level for the first time with this population. Additionally, we employed a model that allowed examination of how relationships between individual-level predictive factors and employment outcomes can be influenced by contextual (state/agency) factors, and were able to uncover some new contextual influences (e.g., advantages for VR service in blind agencies) that heretofore were unknown.

## **Limitations**

Although measures are limited in the RSA-911 data, indirect indicators can often be used as we did for work experience. However, the absence of certain measure domains (e.g., social interaction and motivational) should be addressed by other data sources. Because of the multilevel approach and scope of this inquiry, we did not include the added impacts of services, clearly needed in future research.

## **Major Conclusions and Recommendations**

- Regarding policy on agency structure, separate agencies exclusively serving consumers who are blind or visually impaired should be retained to optimize employment outcomes. Our study adds important new findings to existing evidence (e.g., Cavanaugh, 2010) supporting the advantages of services in blind agencies. This may be due to a synergistic focus in these agencies. We found compensatory effects for blind agencies – SSDI recipients at risk for poor employment outcomes (e.g., females and some race/ethnicity groups) can have those risks overcome; have better outcomes when served in blind agencies. This compensatory effect was particularly clearly demonstrated by our finding showing that the decline in competitive employment for those older at application (e.g., past late 30s) can be mitigated by services in blind agencies.
- Work history again has been validated as important for competitive employment. SSDI-beneficiary consumers are different from general adult consumers with blindness. Mostly they have documented work history, and previous research shows this is a definite positive factor for employment. We found that competitive employment was more likely for consumers with higher earnings and those with greater SSDI payment at application. (This

was in contrast to possible expectations that greater SSDI income would act as a disincentive.)

- Regarding practice implications, VR administrators should be mindful of the importance of early work history and implement policies that facilitate opportunities for consumers to engage in work experiences early in the VR process. Although older adults will enter the VR program with or without established work histories, transition-age students will likely have opportunities to participate in work experiences as a VR consumer. Interagency agreements between VR agencies and local education agencies can provide a framework to increase work opportunities for secondary students who are clients or will soon be clients of VR. VR agencies are also encouraged to collaborate with community rehabilitation programs in conducting summer transition programs with work components.
- Race/ethnicity influences seem to be different for SSDI consumers. Their work experience may have a “leveling effect” for race/ethnicity differences. Practice implications are that employment risk factors usually associated with certain race/ethnicity groups may be reduced if work experiences can be arranged as part of VR.
- Future research should consider the influence of both SSDI and SSI receipt separately and when both are received.
- State VR agencies generally have policies that all consumers with SSDI be provided “benefits planning services.” Counselors can reduce consumer uncertainty and fear related to loss of benefits by supporting clients in understanding and implementing work incentives available for recipients and other supports for employed individuals with disabilities such as Medicaid Buy-In Programs.

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