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Rural and urban vocational rehabilitation self-employment outcomes

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Abstract.
BACKGROUND: Self-employment is an attractive option for people with disabilities because it offers a means to economic independence while overcoming barriers (ODEP, 2013). Compared to national averages, however, self-employment is an underutilized employment strategy in Vocational Rehabilitation (VR). Cited reasons for this discrepancy include VR concerns about self-employment business failures and income potential.
OBJECTIVE: This paper explores the viability of VR self-employment closures across geography.
METHODS: We compiled 2008 and 2009 RSA-911 data with zip code and county variables from 47 VR agencies ($n = 711{,}037$ cases). We used Rural-Urban Commuting Area (RUCA2) codes matched on zip code to group cases into urban, rural, very rural, and isolated rural geography.
RESULTS: Closure rates to self-employment increased as geography become more rural. Weekly earnings rates were similar across competitive and self-employment closures, but consumers closed to self-employment worked fewer hours per week ($p \leq 0.001$) and earned significantly higher hourly wages ($p \leq 0.001$).
CONCLUSION: Data show that self-employment offers a viable employment option in terms of weekly earnings and hourly wages. Increased capacity in self-employment is important for rural consumers who face additional barriers to employment such as limited transportation options and a narrower range of competitive employment options.

Keywords: Vocational rehabilitation, self-employment, rural, urban

1. Introduction

Self-employment provides an alternative to traditional employment and increases career opportunity in rural communities with few employment options (Office of Disability and Employment Policy – ODEP, 2005; von Reichert, Cromartie, & Arthum, 2011). Supporting this, data from the 2012 American Community Survey showed that self-employment rates were significantly higher in non-metro (11.7% of employer persons over 16) as compared to metro counties (9.7% of employed persons over 16; U.S. Census, 2012). These rates will likely increase over time as telecommunication access and internet commerce grows (Yamamoto, Unruh, & Bullis, 2011).

A report by the Office of Disability and Employment Policy (ODEP) indicated that people with disabilities were almost twice as likely to be self-employed as the general population (2005). Self-employment is an attractive option for people with disabilities because it offers a means to economic independence while overcoming barriers (ODEP, 2013). For instance, self-employment allows people to remain close to an established support network (Seekins & Arnold, 1999), offers scheduling flexibility to address health issues that accompany disability (Clark & Kays, 1999; Office of Disability Employment Policy – ODEP, 2005), and reduces

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environmental barriers to employment such as inaccessible workspaces or transportation (Ipsen, 2012; ODEP, 2005).

Given these findings, one might expect Vocational Rehabilitation (VR) self-employment closures to parallel national averages. VR outcomes data (RSA-911), however, describe a different story. From 2003 to 2007, VR closures to self-employment hovered in the 2% range (Revell, Smith & Inge, 2009) despite supportive legislative amendments and improved VR self-employment policies and procedures (Arnold & Ipsen, 2005; Colling & Arnold, 2007).

Cited reasons for this discrepancy include negative VR counselor attitudes about self-employment viability (Arnold et al., 2003), limited trained personnel in small business start-ups (Ipsen, Arnold, & Colling, 2005; Colling & Arnold, 2007; ODEP, 2013), VR case costs to support self-employment (Yamamoto & Alverson, 2013) and concerns about self-employment business failures and income potential (Colling & Arnold, 2007; Yamamoto et al., 2012). Counter to these concerns, Revell et al. (2009) found that VR closures to self-employment actually yielded higher weekly earnings than did competitive work closures. Revell, et al., also reported that some VR programs utilized self-employment at higher rates, particularly in rural states such as Mississippi (12.6%), Wyoming (7.9%), Alaska (6.6%) and Maine (6.0%). Yamamoto and Alverson (2013) confirmed this finding in a structural equation model that showed probabilities of self-employment closures varied significantly across states, after controlling for individual level factors (Yamamoto & Alverson, 2013).

This paper expands on these findings by providing a more comprehensive exploration of geographic differences in VR self-employment outcomes. Using RSA-911 data with the addition of ZIP code and county code variables, we were able to compare urban and rural outcomes at the county level and control for economic employment indicators, such as county rate of unemployment.

2. Methods

2.1. Data collection

After securing Council of State Administrators of Vocational Rehabilitation (CSAVR) approval to conduct the research, we began contacting VR administrators from states serving a rural case mix. We sent cover letters and followed up by telephone to request 2008 and 2009 RSA-911 data with the addition of two variables – ZIP code and county name. We did not recruit from agencies located in the U.S. territories ($n = 5$) or from agencies located in primarily urban states, including CT, DE, DC, MD, MA, NJ and RI ($n = 11$).

In total, 48 agencies agreed to participate in the study, but one of these was unable to provide data due to data conversion activities. Eleven agencies declined to participate (5 agencies serving a blind/low vision population, 3 agencies serving a general population (excluding blind/low vision) and 3 agencies serving a combined population). An additional 3 agencies serving the blind/low vision population were not contacted because the general agency was not participating in the study. We never reached 4 agency directors to make a request despite several attempts. Excluding agencies that were never contacted ($n = 19$), the overall response rate was 75% of VR agencies.

Agencies provided de-identified and password protected RSA-911 data plus ZIP and county code information to our data manager. Files from each agency were compiled into a master SPSS file for analyses. Additional variables were added to the master file by matching on county and ZIP code information, including county labor force information from the Bureau of Labor Statistics (2008 and 2009 matched by case year); population data including educational attainment, housing, income, and labor data from the US Census (2000 to 2009 data as available by county); and SSI data from the Social Security Administration (2009).

To account for the influence of urban adjacency, we delineated case geography using Rural-Urban Commuting Area (RUCA2) codes and a classification developed by the University of Washington (USDA, 2005; Rural Health Research Center, n.d.). Typically, RUCA2 codes are matched to ZIP code but use census tracts to develop a detailed delineation of geographic area based on commuting flows. The end result is a classification scheme that includes 33 categories that can be organized or collapsed to address specific research questions (Rural Health Research Center, n.d.). The Rural Health Research Center (RHRC; n.d.) suggests several categorizations composed of the 33 categories including a four level system defined as urban, large rural, small rural, and isolated rural. We used this four category classification for our geographic analyses.

2.2. Participants

We started with 832,983 cases. From these, we excluded cases (a) if the consumer was under age 16; (b) if the record had an invalid or missing ZIP and/or FIPS code; (c) if the case had a closure order higher than one, indicating that the consumer had been a VR client more than once in a single year; (d) if the case had been open more than 5 years (indicating possible case inactivity); (e) if the consumer was deemed ineligible for services; or (f) if the time to development of an Individualized Plan for Employment (IPE) or case duration was negative – indicating a data error. The final database included 711,037 closed cases from 2008 and 2009.

3. Results

To fully describe VR self-employment outcomes by geography, results are reported for closure rates, weekly earnings and hours, and estimated hourly rates. We also examined cost of purchased services between self-employment and competitive closures. Finally, we constructed a logistic regression model to explore factors predicting self-employment outcomes, such as individual characteristics, economic indicators, and geographic factors.

3.1. Self-employment by geography

Closure rates to self-employment increased as geography became more rural. Table 1 provides closure rates to self-employment as a percentage of status 26 closures for all cases and broken out for FY 2008 and FY 2009. A status 26 closure occurs when a consumer has successfully attained his or her vocational goal and reached an employment outcome. Because trends for urban, large rural, small rural, and isolated rural locations were similar across years, data were merged in remaining analyses to maximize cell counts, particularly for agencies with low rates of self-employment closures.

3.2. Agency comparisons

Status 26 closures to self-employment varied widely across agencies from a low of 0.3% to a high of 14.4%. Overall, 25 out of 47 agencies had rates higher than the 2.1% average. Of those, 13 agencies served a general or combined caseload (37% of general/combined agencies) and 12 served a blind/low vision caseload (100% of blind/low vision agencies). Table 2 reports self-employment closure rates for general/combined agencies above the mean. Table 3 presents similar data for the blind/low vision agencies, but several cell counts were extremely low and results should be interpreted with caution. Chi-square model statistics are indicated for each agency, and significant *post hoc* z-test group comparisons are denoted by letters within table columns.

3.3. Closure rates by disability type by geography

Closure rates to self-employment were significantly different based on disability type – learning impairment (0.4%), cognitive impairment (0.6%), mental illness (1.1%), sensory non-visual impairment (2.9%), physical disability (3.7%), and visual impairment (6.6%). This aligned with agency level results, which showed that all blind agencies in the sample had closure rates to self-employment that were above the mean.

3.4. Weekly earnings, weekly hours and hourly wage comparisons by geography

We used weekly earnings and hours to calculate an hourly wage rate. We conducted independent samples *t*-tests to compare weekly earnings, weekly hours,

Table 1
Percent of status 26 closure rates to self-employment

	Total	Urban	Large Rural	Small Rural	Isolated Rural
Total ($n = 230{,}931$)**	2.1%	1.4%[a]	3.5%[b]	3.7%[b]	5.2%[c]
FY 2008 ($n = 123{,}550$)**	1.9%	1.2%[a]	3.1%[b]	3.6%[b]	5.1%[c]
FY 2009 ($n = 107{,}381$)**	2.3%	1.6%[a]	3.9%[b]	3.8%[b]	5.3%[c]

[a,b,c]Each subscript letter denotes a subset of geographic classification categories whose column proportions do not differ significantly from each other at the 0.05 with Bonferoni correction. *$p < 0.05$. **$p < 0.01$.

Table 2
Percent of status 26 closure rates to self-employment by general/combined agency

	Total	Urban	Large Rural	Small Rural	Isolated Rural
Mississippi ($n = 1230$)**	14.4	13.1[a]	14.8[a]	14.9[a]	15.9[a]
Vermont ($n = 211$)**	7.6	6.1[a]	5.1[a]	6.1[a]	12.5[b]
Wyoming ($n = 83$)**	6.8	5.6[a]	4.4[a]	7.7[a]	18.8[b]
New Mexico ($n = 175$)*	6.1	5.4[a]	6.7[a]	8.0[a]	8.8[a]
Montana ($n = 82$)**	5.6	4.2[a]	4.5[a]	7.1[b]	10.9[b]
Alaska ($n = 56$)**	5.5	5.1[a]	3.0[a]	4.9[b]	14.9[b]
Oklahoma ($n = 78$)**	2.9	2.2[a]	4.0[a]	2.3[a]	4.9[a]
Louisiana ($n = 130$)**	2.9	2.6[a]	3.2[a]	3.0[a]	9.5[b]
Idaho ($n = 71$)**	2.8	1.9[a]	3.2[b]	6.0[b]	7.0[b]
North Carolina ($n = 287$)**	2.7	2.0[a]	3.4[b]	3.2[a,b]	5.6[b]
Wisconsin ($n = 139$)**	2.7	1.4[a]	4.8[b]	3.2[b]	9.6[c]
Oregon ($n = 109$)**	2.6	1.9[a]	4.4[b]	3.5[a,b]	9.2[b]
Iowa ($n = 77$)	2.4	1.6	2.4	3.2	3.2

[a,b,c]Each subscript letter denotes a subset of geographic classification categories whose column proportions do not differ significantly from each other at the 0.05 with Bonferoni correction. *$\chi 2$ $p < 0.05$. **$\chi 2$ $p < 0.01$.

Table 3
Percent of status 26 closure rates to self-employment by blind/low vision agency

	Total	Urban	Large Rural	Small Rural	Isolated Rural
Idaho Blind ($n = 12$)	10.8	10.5	20.0	14.3	0.0
Michigan Blind ($n = 26$)	9.4	9.9	9.1	5.9	0.0
South Dakota Blind ($n = 18$)	9.4	5.2	10.9	20.0	15.4
Florida Blind ($n = 108$)*	8.7	7.8[a]	25.6[b]	18.2[a,b]	7.7[a,b]
New Mexico Blind ($n = 4$)	7.4	5.4	13.3	0	0
Kentucky Blind ($n = 49$)	7.4	6.9	4.7	8.0	10.9
Minnesota Blind ($n = 9$)	7.1	7.7	0	8.3	18.2
Nebraska Blind ($n = 3$)	4.1	2.3	0	0	33.3
New York Blind ($n = 33$)	4.0	4.2	2.7	4.0	0
Arkansas Blind ($n = 20$)	3.2	2.6	2.1	5.3	4.8
South Carolina Blind ($n = 17$)*	3.0	1.9[a]	7.0[b]	2.6[a,b]	4.8[a,b]
Iowa Blind ($n = 4$)	2.6	0.9	9.1	8.3	0

[a,b,c] Each subscript letter denotes a subset of geographic classification categories whose column proportions do not differ significantly from each other at the .05 with Bonferoni correction. *$p < 0.05$. **$p < 0.01$.

and hourly wages at closure to competitive employment in integrated settings and self-employment. Because earnings distributions were highly skewed by a limited number of cases, we trimmed the top 1% of hourly wage earners (>$42.78/hour) from the data. Table 4 reports results for the trimmed sample by geographic designation.

The data showed that weekly earnings rates were similar across competitive and self-employment closures, but that consumers with self-employment cases worked fewer hours per week and earned significantly higher hourly wages.

3.5. Cost of purchased services

For all geographies, VR costs of purchased services were significantly higher for self-employment relative to competitive employment closures. Table 5 reports on these comparisons for the total sample and for urban, large rural, small rural, and isolated rural cases.

3.6. Logistic regression model

Table 6 shows logistic regression results for a model exploring predictors of self-employment closure, including individual, economic, and geographic characteristics. The model sample consisted of cases with closures to self-employment and competitive employment in integrated settings ($n = 195{,}779$). Explanatory variables included:

- *Age*. Age at application was expected to increase the odds of self-employment closure (Hipple, 2010).
- *Gender*. Female gender was expected to decrease the odds of self-employment (Hipple, 2010; Yamamoto & Alverson, 2013).

Table 4
Earnings and hours comparisons between competitive and self-employment closures

	Weekly earnings			Weekly hours			Hourly wage rate		
	Competitive	Self-employment	Sig.	Competitive	Self-employment	Sig.	Competitive	Self-employment	Sig.
Total									
n_{comp} = 191,139	*M* = $367.06	*M* = $368.14	0.756	*M* = 32.98	*M* = 29.94	0.000	*M* = $10.76	*M* = $12.09	0.000
n_{se} = 4,640	*Mdn* = $320.00	*Mdn* = $300.00		*Mdn* = 40.00	*Mdn* = 30.00		*Mdn* = $9.00	*Mdn* = $10.00	
Urban									
n_{comp} = 135,293	*M* = $371.37	*M* = $377.19	0.259	*M* = 32.75	*M* = 29.13	0.040	*M* = $10.97	*M* = $12.83	0.000
n_{se} = 2,164	*Mdn* = $300.00	*Mdn* = $300.00		*Mdn* = 40.00	*Mdn* = 30.00		*Mdn* = $9.07	*Mdn* = $10.00	
Large Rural									
n_{comp} = 29,543	*M* = $353.28	*M* = $350.68	0.697	*M* = 33.25	*M* = 30.26	0.000	*M* = $10.25	*M* = $11.30	0.000
n_{se} = 1,186	*Mdn* = $300.00	*Mdn* = $280.50		*Mdn* = 40.00	*Mdn* = 30.00		*Mdn* = $8.65	*Mdn* = $10.00	
Small Rural									
n_{comp} = 16,108	*M* = $357.77	*M* = $359.39	0.850	*M* = 33.82	*M* = 30.85	0.000	*M* = $10.26	*M* = $11.34	0.000
n_{se} = 676	*Mdn* = $320.00	*Mdn* = $300.00		*Mdn* = 40.00	*Mdn* = 30.50		*Mdn* = $8.66	*Mdn* = $10.00	
Isolated Rural									
n_{comp} = 10,285	*M* = $364.44	*M* = $379.61	0.104	*M* = 34.02	*M* = 31.17	0.000	*M* = $10.42	*M* = $11.84	0.000
n_{se} = 614	*Mdn* = $320.00	*Mdn* = $300.00		*Mdn* = 40.00	*Mdn* = 35.00		*Mdn* = $9.00	*Mdn* = $10.00	

Table 5
Cost of purchased services comparisons between competitive and self-employment

	Competitive *M*	Self-Employment *M*	*t*	Sig.
Total				
n_{comp} = 190,976	$3,415	$6,292	16.43	$p < 0.001$
n_{se} = 4,640				
Urban				
n_{comp} = 135,153	$3,498	$6,127	12.33	$p < 0.001$
n_{se} = 2,164				
Large Rural				
n_{comp} = 29,533	$3,184	$5,846	7.80	$p < 0.001$
n_{se} = 1,186				
Small Rural				
n_{comp} = 16,010	$3,192	$5,732	7.30	$p < 0.001$
n_{se} = 676				
Isolated Rural				
n_{comp} = 10,280	$3,341	$8,356	6.46	$p < 0.001$
n_{se} = 614				

- *Education category*. We coded RSA data to reflect 4 levels of education including (1) less than a high school diploma, (2) high school graduate or GED, (3) some college or associates degree, and (4) bachelor's degree or higher. These definitions corresponded to definitions reported in Bureau of Labor Statistics (BLS) employment statistics (BLS, 2012b). We were unsure how education would impact self-employment closures. US Labor Force statistics showed that advances in educational attainment were associated with lower rates of unincorporated self-employment, but higher rates of incorporated self-employment (Hipple, 2010). A study of VR closures with a single dummy variable for post-high school education showed that closure rates increased with educational attainment, but these analyses did not account for varied levels of educational attainment (Yamamoto & Alverson, 2013).
- *Minority*. We created a dummy variable for minority respondents, which was expected to decrease the probability of employment (Hipple, 2010; Yamamoto & Alverson, 2013). Minority respondents included consumers who were Black/African American, American Indian/Alaska Native, Asian, Native Hawaiian/Other Pacific Islander, and/or Hispanic or Latino.
- *Primary impairment*. The RSA-911 database included a list of 18 primary impairments that were loosely organized into three broad categories including sensory, physical, and mental impairments. These categories were expanded to

Table 6
Logistic regression for self-employment closures

	B	SE	Wald	df	Sig.	Exp(B)	95% CI Lower	95% CI Upper
Model Variables								
Age*	0.043	0.001	1157.75	1	0.000	1.044	1.041	1.046
Female	–0.533	0.032	284.19	1	0.000	0.587	0.551	0.624
High school graduate or GED+	–0.026	0.042	0.370	1	0.543	0.975	0.897	1.059
Some college or Associate's+	–0.006	0.046	0.017	1	0.896	0.994	0.908	1.088
Bachelor's degree of higher+	0.057	0.054	1.095	1	0.295	1.058	0.952	1.177
Minority	–0.321	0.038	70.721	1	0.000	0.726	0.673	0.782
Cognitive disability†	–0.033	0.082	0.161	1	0.689	0.968	0.825	1.136
Learning disability†	–0.584	0.101	33.12	1	0.000	0.558	0.457	0.681
Physical disability†	0.795	0.045	309.32	1	0.000	2.214	2.026	2.419
Sensory (not visual) disability†	0.153	0.056	7.58	1	0.006	1.166	1.045	1.300
Visual disability†	1.499	0.055	744.24	1	0.000	4.479	4.021	4.988
2009 unemployment rate	–0.018	0.005	11.29	1	0.001	0.983	0.972	0.993
Large Rural‡	0.822	0.037	482.18	1	0.000	2.275	2.114	2.449
Small Rural‡	0.904	0.046	385.28	1	0.000	2.469	2.256	2.702
Isolated Rural‡	1.237	0.049	646.99	1	0.000	3.444	3.131	3.788
Constant	*5.858*	*0.088*	*4450.27*	*1*	*0.000*	*0.003*		

*Age at application categories use "age 16 to 19" as the referent category. +Education at application categories use "less than high school graduation" as the referent category. †Primary impairments use "mental health disability" as the referent category. ‡Rural classifications use "Urban" as the referent category.

include visual, cognitive, and learning disabilities using additional information about cause of primary impairment. For these analyses, we defined six disability groups from the RSA-911 codes.

- *Visual.* Dummy variable coded from blindness; other visual impairment; deaf-blindness.
- *Sensory.* Dummy variable coded from deafness-primary communication visual; deafness-primary communication auditory; hearing loss-primary communication visual; hearing loss-primary communication auditory; other hearing impairments, communicative impairments.
- *Physical.* Dummy variable coded from mobility; manipulation, both mobility and manipulation; other orthopedic; respiratory; general physical debilitation; and other physical impairments.
- *Cognitive.* Dummy variable coded from cognitive impairments, excluding primary impairment causes related to ADHD or other learning disabilities.
- *Mental.* Dummy variable coded from psychosocial impairments and other mental impairments.
- *Learning.* Dummy variable coded from cognitive impairments with primary impairment causes related to ADHD or other learning disabilities.

- *Unemployment rate.* Civilian labor force unemployment rate by county (U.S. Census, 2009).
- *Geographic variables*. We evaluated geography using the four category classification of urban, large rural, small rural, and isolated rural places (RHRC, n.d.). We expected rates of self-employment to increase as cases become more rural (Revell, et al., 2009; U.S. Census, 2012).

4. Discussion

4.1. Rural opportunities

Data showed that closure rates to self-employment were significantly higher as geography become more rural when using RUCA2 codes and the four classification system for urban, large rural, small rural, and isolated rural places. Data also confirmed agency level findings reported by Revell, et al. (2009) that agencies in more rural states had higher closure rates to self-employment. These findings align with national statistics for the general population showing higher rates of self-employment in non-metro as compared to metro counties (U.S. Census, 2012) and highlight the importance of self-employment as a rural option.

4.2. Self-employment viability

In his study of VR self-employment rates, Revell, et al. (2009) found significantly higher weekly earnings for self-employment as compared to competitive work closures. This finding was true in our untrimmed data, but did not hold up when we excluded the top 1% of wage earners from the sample. Despite this discrepancy, data showed significant differences in hours worked per week and hourly wage rates. Overall, our findings indicate that individuals who were self-employed had similar weekly earnings but did so working fewer hours. This is an important finding, because it dispels concerns about self-employment as a viable employment closure (Arnold, et al., 2003; Colling & Arnold, 2007, Yamamoto et al., 2011)

4.3. VR costs to support self-employment

Yamamoto and Alverson (2013) reported that VR agencies were reluctant to utilize self-employment due to higher associated VR case costs. This concern was borne out in the data, where costs of purchased services for self-employment closures were typically double the costs of purchased services for competitive employment closures. Unfortunately, RSA-911 data does not include a break-out of purchased services, so we cannot compare types of costs between competitive and self-employment closures.

4.4. Characteristics of self-employment closures

The logistic regression model examined self-employment case characteristics. Several model variables performed as hypothesized. For instance, advanced age and rural locations increased the odds of self-employment closures, while female gender and minority status lowered the odds. Because RSA-911 data do not delineate between incorporated and unincorporated business types, it was not surprising that educational levels were not significant predictors. For the general population, educational attainment worked in different directions based on incorporated versus unincorporated status (U.S. Census, 2012). As expected, the odds of self-employment closures were different based on disability type. Individuals with physical disability and visual impairments were the most likely to achieve a self-employment outcome. Self-employment may be an attractive outcome for these disability types based on worksite based access issues (Ipsen, 2012; ODEP, 2005).

5. Limitations

There are several limitations to this study. First, case data were collected from 2008 and 2009, during a period described as the Great Recession. The Great Recession, during which blue collar and service industries such as construction, manufacturing, and retail trade were severely impacted (BLS, 2012a), was marked by the highest long-term unemployment rate since the Great Depression. These economic outcomes were borne disproportionately by people with disabilities and likely shaped the VR competitive and self-employment outcomes reported during this period (Fogg, Harrington, & McMahon, 2010).

There were also limitations within RSA-911 data elements. For instance, while data fields allowed for exploration of self-employment outcomes, they did not include indicators such as whether the business was incorporated. Likewise, although 911 data included dollar amounts of purchased services, it did not include how these dollars were distributed across services or for business start-up.

A final consideration relates to sample size. While data came from a very large sample, there were still instances in which data comparisons were hampered by small cell counts, particularly for agencies focused on blind/low vision populations. Although we could draw tentative conclusions from these data, a larger sample size across geography and agency type would help with overall interpretative power.

6. Conclusion

As compared to the national average, self-employment is an underutilized employment option within the VR system (Revell, Smith & Inge, 2009, U.S. Census, 2012). Cited reasons for this discrepancy include concerns about self-employment viability, staff capacity to support self-employment, and associated VR case costs related to business start-up. At a minimum, the data showed that self-employment offered a viable employment outcome in terms of weekly earnings and hourly wages. Data also indicated that several agencies had successfully developed staff and resources to support significantly higher rates of self-employment closures. Much could be learned from these states in terms of self-employment delivery practices and strategies to overcome internal capacity barriers. Increased capacity is important, particularly for rural consumers who face more limited competitive employment options.

Additional strategies to enhance self-employment include revised VR policies and procedures and cross-system collaborations to build capacity (Arnold & Ipsen, 2005; ODEP, 2013). For instance, a synthesis of findings from the ODEP START-UP self-employment demonstration projects suggested that "RSA could articulate policies specific to self-employment, including curricula for youth approaching transition, certification, and training for providers to guide people with disabilities in developing small businesses, and financial support for the small business development process..." (ODEP, 2013, p. 33). Likewise, demonstrations highlighted how VR capacity might be increased through interagency linkages with Small Business Development Centers (SBDCs) or other related workforce programs and through training initiatives (ODEP, 2013).

A comprehensive approach to improving self-employment outcomes benefits people with disabilities and their communities by providing employment opportunities and small business development in rural communities. Self-employment promotes independence and should be supported as a viable and sustaining employment outcome.

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Conflict of interest

The authors have no conflict of interest to report.

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