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# Vocational Rehabilitation Counselors' Self-Employment Perceptions and Related Client Characteristics

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Self-employment is a viable option to increase the quality of life and well-being of people with disabilities. People with disabilities are also twice as likely to be self-employed than those in the general population. While self-employment interest and activity among people with disabilities has remained constant over the past three decades, vocational rehabilitation counselors rarely use self-employment as a closure option. The purpose of the present study was to examine counselors' perceptions regarding self-employment and identify client characteristics deemed necessary for self-employment success. The national sample consisted of 205 Certified Rehabilitation Counselors. Significant statistical differences were found among counselors in variables including: age, education, disability status, time worked, employment status, self-employment experience, and work sector. Opportunities for future research and implications for the field of rehabilitation are discussed.

**Keywords:** self-employment; people with disabilities; vocational rehabilitation; certified rehabilitation counselors; client characteristics

People with disabilities (PWD) are twice as likely as those in the general population to be self-employed, however, vocational rehabilitation counselors (VRCs) rarely utilize self-employment as a closure option. According to the U.S. Department of Labor Statistics (2020), 10.3% of PWD were self-employed in 2017 compared to 6% of those without disabilities. While this self-employment trend among PWD has endured (Galle & Lacho, 2009), it appears, in many cases, to be without assistance from vocational rehabilitation (VR). According to 2017 Rehabilitation Services Administration (RSA) statistics, nationwide VR served 328,226 individuals with disabilities, resulting in 186,234 successful case closures; however, the self-employment case closure rate within VR remains low (Ravesloot & Seekins, 1996; Yamamoto & Alverson, 2013) with only 3,475 self-employment closures in 2017, which is less than 2% (RSA, 2018).

## **LEGISLATION REGARDING SELF-EMPLOYMENT FOR PWD**

Legislation mandated by the U. S. Federal Government is crucial to potential self-employment success experienced by PWD. In its attempts to address disparities experienced by PWD, and to position itself as a leader in the empowerment and employment of PWD, two fundamental pieces of federal legislation address the self-employment pursuits of PWD. The Rehabilitation Act of 1973 (P.L. 93–112), section 103(a)(13) authorized services to facilitate self-employment for eligible PWD including resources for market analysis, technical assistance, business planning, consultation, and other appropriate resources.

Secondly, the Workforce Investment and Opportunities Act (WIOA) of 2014 amended the Rehabilitation Act to modernize systems supporting PWD. In addition to streamlining systems, WIOA potentially increased competitive employment supports and improved collaboration between governmental agencies: adult education, VR, and workforce development (Martinis, 2015; Wohl, 2015). Both these crucial pieces of legislation and their subsequent amendments focus on the workplace inclusion and support of PWD as they pursue personal and financial self-sufficiency, autonomy, and societal inclusion, including integration into the workplace and marketplace (20 U.S. Code § 9201).

### **Benefits of Self-Employment**

Self-employment may provide a path to independence and self-actualization for PWD, by countering disparities, reducing barriers, and increasing the number of PWD who are active in the marketplace (Griffin, 2013; Yamamoto & Alverson, 2013). The Office of Disability Employment Policy recognizes self-employment as a means of customized employment that provides necessary supports and enables PWD to perform individualized job functions (Callahan et al., 2011). As well, self-employment can increase quality of life, and well-being for PWD. Self-employment represents a sustainable choice allowing PWD to control their time, schedules, unique accommodation and transportation requirements, communication, and accessibility needs (Ali et al., 2011; Burkhalter & Curtis, 1990; Palmer et al., 2000).

Additional benefits associated with self-employment include (a) opportunity to earn income and advance career; (b) opportunity for wealth-building along with access to unconventional sources of capital; (c) supported startup with minimized risks; (d) the ability to align one's needs, strengths, and vocational interests to marketplace demands; and (e) the opportunity to manage one's own time to accommodate health and living necessities, that is, medication regimes, mobility impairment, attendant care (Griffin et al., 2014). Self-employment is especially beneficial for residents in rural areas experiencing the highest rates of poverty. Despite transportation difficulties and other challenges, self-employment allows PWD to produce income, negating the need to relocate to an urban setting (Arnold et al., 2003).

Self-employment similarly provides PWD the opportunity to overcome obstacles associated with disability and increases self-efficacy by focusing on skills, education, and acquired training. According to Rafaty (2018), a self-identified person with a disability and business owner, access to a supportive network of experts, and advisors helps with goal attainment needed to ascertain self-employment. McNaughton et al. (2006) identified other benefits of self-employment for PWD including dignity associated with ability to make one's own decisions, freedom associated with managing one's own time, satisfaction from being a contributing member of society, autonomy to choose a satisfying career, and the ability to positively impact social change.

## Barriers of Self-Employment

Barriers, both internal and external, encountered by PWD in their employment endeavors are well documented in the literature (Ashley & Graf, 2018; Bal et al., 2016; Lindsay, 2011; Roessler et al., 2007). Along with demographic characteristics, internal barriers may include health-related issues that may impede progress, training limitations, educational gaps, and transportation deficiencies (Yamamoto et al., 2012). Amid internal barriers are self-perception barriers regarding one's own ability to succeed, which can be either heightened or mitigated depending on the experience with VR (Rumrill & Bellini, 2018).

External barriers for PWD may begin with VR procedures, policies, or lack thereof, making self-employment less attainable for PWD. Inconsistencies and deficiencies across state VR systems may also pose barriers for PWD. According to Yamamoto and Olson (2016), while some VR programs appear adequately staffed and resource equipped for self-employment, others may lack the wherewithal to facilitate self-employment closures. Additionally, some VRCs may exhibit a negative attitude due to oppositional feelings toward self-employment, viewing it as a deterrent to VRC success amidst "a numbers game" (counselor described) imposed by their administration (Yamamoto & Olson, 2016, p. 7). In a qualitative inquiry, Ashley and Graf (2018) discovered while PWD showed interest and desire for self-employment, participants in the study revealed their experiences with VR were oppositional, unsupportive, and lacking "leadership and guidance skills" (p. 95). In addition, Ashley and Graf specified that while some PWD received support from VR to become self-employed, many more indicated that support received via VR was limited. Participants also indicated that VRCs discouraged pursuit of self-employment, at times, and VRCs did not possess the business-related competencies or proper attitudes to help PWD become self-employed.

VRCs' perceptions and use of self-employment as a "last resort" (p. 51) option may explicate low numbers of self-employment closure, revealing an embedded attitude of VRCs towards self-employment (Arnold et al., 2003). Arnold and Seekins (1994) reported often-times VRCs were required to eliminate all other options before considering self-employment as a closure option, further exhibiting bias toward the process of self-employment. More recently, researchers have documented system deficiencies including a lack of business training among VRCs along with other system deficits thwarting self-employment success among PWD (Arnold & Ipsen, 2005; Ashley & Graf, 2018; Hein et al., 2005; Palmer et al., 2000). Several models have attempted to address deficiencies by providing structures and protocols related to policy and procedure, self-employment training, business development practices, and usage of self-employment as a case closure (Arnold et al., 2003; Galle & Lacho, 2009). No assessments related to the efficacy of these models could be located in the literature.

## Predictors of Self-Employment Among PWD

While the prevalence of self-employment has grown among the general population, PWD are employed twice the rate of people without disabilities. According to Yamamoto and Alverson (2018), this surge in self-employment activity over the last two decades may be attributed dually to the transition from industrial manufacturing to a more technologically, service-based economy and, among PWD, a shift toward "consumer choice and self-determination in employment" (p. 270). Consequently, a discussion regarding predictors of self-employment among PWD is merited, namely as related to the characteristics that VRCs view as important for PWD' self-employment potential. Additionally, this discussion is imperative as self-employment among PWD consists of both fiscal and nonfinancial aspects directly related to the systems, services, and resources PWD may receive from VR (Yamamoto et al., 2012).

Early VRC recognition of characteristics associated with self-employment success may facilitate the identification of potential self-employment opportunities among PWD. Yamamoto and Alverson (2013) described key predictors of self-employment case closure after reviewing more than a million VR cases from 2003 to 2007 to include ethnicity, educational level, and gender. Being white and male were the greatest predictors of self-employment success. According to their study, white clients were 91%, and males were 23% more likely to become self-employed; those with post high school education were 37% more likely (Yamamoto & Alverson, 2013).

Ravesloot and Seekins (1996) surveyed rehabilitation counselors regarding their attitudes concerning self-employment outcomes finding that counselor past experience with self-employment, work atmosphere, and state policy influence their attitudes toward self-employment closure. After surveying 78 VRCs from ten states, Ravesloot and Seekins concluded that successful client self-employment closures were positively correlated with counselor attitudes toward self-employment. Counselors with more favorable, positive attitudes regarding self-employment as a closure were more likely to report self-employment closures.

### **Characteristics Associated With Self-Employment Success**

Researchers have studied characteristics prevalent among entrepreneurs and self-employed individuals (Baum & Locke, 2004; Rauch & Frese, 2007; Zhao et al., 2010) and specifically traits aligned with self-employment success among those with disabilities (Freeman et al., 2018; Yamamoto & Alverson, 2013, 2015). Characteristics associated with entrepreneurial success in the general population include: risk tolerance (Caliendo et al., 2009); intelligence or educational background (Block et al., 2013); persistence (Patel & Thatcher, 2014); business skills including organizational, financial, communication, and technical skills (Roodt, 2005); affable personality, and strong social skills (Rauch & Frese, 2007). Additionally, Fairlie and Robb (2007) found that previous work in a business; particularly a family business was strongly correlated with successful self-employment.

Researchers have investigated self-employment among PWD and related rehabilitation counselor attitudes since the 1990s. Despite research initiated by the Research and Training Center in Rural Communities (Arnold & Seekins, 1994; 1998; Arnold et al., 1995), current literature regarding VRC involvement in self-employment among PWD is sparse (Yamamoto & Alverson, 2018). Outside of Yamamoto and Alverson's (2018) study, where they interviewed four VRCs, research does not include inquiries into VRCs' viewpoints. A dearth of research remains examining VRCs' experiences, perceptions of the self-employment process, and readiness to implement self-employment as a closure option.

### **Purpose of the Present Study**

The purpose of this study was to understand the perceptions of VRCs regarding the self-employment process and understand client characteristics that VRCs most readily consider when identifying PWD for the self-employment. The study was guided by the following research questions:

**Research Question 1:** What are the current perceptions of VRCs about self-employment as a closure option?

**Research Question 2:** What client characteristics do VRCs deem most desirable when considering self-employment placement of PWD?

## METHOD

### Participants

Counselors with the Commission on Rehabilitation Counselor (CRC) Certification (CRCC) credential have demonstrated competency in service delivery to PWD (CRCC, 2016). Participants in the study ( $n = 205$ ) consisted of VRCs holding the CRC credential to ensure participants possessed experience assisting PWD in employment endeavors, including self-employment. Most participants in the current study identified as female ( $n = 143$ , 69.8%), White ( $n = 160$ , 78%), and between the ages of 45–54 ( $n = 63$ , 30.7%). The majority of participants held Master's degrees ( $n = 190$ , 92.7%), and did not possess disabilities ( $n = 137$ , 66.8%).

Participants work characteristics varied at the time of survey completion. A third of participants ( $n = 68$ , 33%) possessed 6–10 years work as in the field, while others had worked more than 20 years ( $n = 49$ , 23%). Most participants worked full-time ( $n = 188$ , 91.7%). Nearly as many participants possessed self-employment experience ( $n = 85$ , 41.5%) as those who did not ( $n = 120$ , 58.5%). Some participants were current business owners ( $n = 51$ , 24.9%). Participants worked in different settings: nearly half worked in state/county/city government ( $n = 98$ , 47.8%); others worked in federal government. While participants responded from 44 states across all 10 government-defined nationwide regions, most participants worked in rural areas ( $n = 149$ , 72.7%) and for governmental entities ( $n = 137$ , 66.8%). See Table 1 for participant demographics and work characteristics.

### Instrument

Researchers developed the survey for the current study, the Vocational Rehabilitation Counselor Self-Employment Process Survey (VRC-SEPS), subsequent to review of the literature, findings from qualitative inquiry (Ashley & Graf, 2018) focused on self-employment among PWD, and modification of Ravesloot and Seekins' (1996) study examining the attitudes of VRCs regarding self-employment. Ravesloot and Seekins (1996) reported a positive correlation between self-employment closures and counselor attitudes. Fundamental to the current study, Ashley and Graf (2018) found PWD had negative interactions with VRCs during pursuit of self-employment. Thus, the researchers investigated VRC perceptions exploring counselors' conceptualization of the self-employment process. Prior to creation of the VRC-SEPS, researchers gained permission to utilize Ravesloot and Seekins' instrument (C. Ravesloot, personal communication, 2016, August 8).

Rehabilitation and business scholars, statisticians, counselors, and professionals vetted the VRC-SEPS, which focuses on the perceptions, experiences, and readiness of VRCs to assist PWD in self-employment, to support content validity. Vetting experts included one VRC; one VRC supervisor; a self-employment focused disability consultant/author; one university business professor; one university statistics professor; and two rehabilitation professors (one focused on research methods, the other focused on professionalism and rehabilitation counselor identity, both of whom have disabilities). Additionally, after initial survey review, experts tested the survey and provided suggestions including expansion of perception-related questions; elimination of participant income-related questions; adding counselors' private sector/business ownership questions, and minor modifications to increase readability.

**TABLE 1. Participant Demographics and Work Characteristics**

Identified Demographic	<i>n</i>	(%)
Gender		
Male	62	30.2
Female	143	69.8
Ethnicity/Race		
African American or Black	18	8.8
Asian	2	1.0
Caucasian or White	160	78.0
Latina/o or Hispanic	17	8.3
Native American or American Indian	1	0.5
Other	2	1.0
Unreported	5	2.4
Age		
21–34	26	12.7
35–44	53	25.9
45–54	63	30.7
55–64	45	22.0
65+	18	8.8
Education		
Bachelor's Degree	5	2.4
Master's Degree	190	92.7
Doctoral Degree	10	4.9
Disability Status		
Yes	68	33.2
No	137	66.8
Time Worked as VRC		
< 1 year	1	0.5
1–5 years	26	12.7
6–10 years	68	33.2
11–15 years	36	17.6
16–20 years	25	12.2
20 > years	49	23.9
Employment Status		
Full-time	188	91.7
Part-time	17	8.3

*(Continued)*

**TABLE 1. Participant Demographics and Work Characteristics (Continued)**

Identified Demographic	<i>n</i>	(%)
Previous Self-Employment Status		
Yes	85	41.5
No	120	58.5
Current Self-Employment Status		
Yes	51	24.9
No	154	75.1
Work Setting		
Business/Industry (Including private, for-profit rehabilitation)	15	7.3
College/University	4	2.0
Private, non-profit Counseling/Rehabilitation	14	6.8
Federal Government	35	17.1
State/County/City Government	98	47.8
Hospital	2	1.0
Insurance Company	5	2.4
Self-Employed/Private Practice	28	13.7
Employment Area		
Rural	149	72.7
Urban	55	26.8
Work Sector		
For-Profit	49	23.9
Non-Profit	18	8.8
Government Agency	137	66.8

**Note.** VRC = vocational rehabilitation counselor.

Following suggested revisions, the researchers piloted the VRC-SEPS by sending it to five rehabilitation professionals, four of which were CRCs. Piloting experts included two rehabilitation counseling doctoral students (one a CRC with previous community mental health counseling experience; the other a VRC working with veterans); one university rehabilitation professor and disability services administrator at a community college; and two practicing rehabilitation professionals at state agencies (one a doctoral student working full-time as a VRC and one a vocational evaluator). Researchers asked piloting experts to provide general feedback, recommend changes to improve comprehension, and approximate survey completion time. Experts reported 10 minutes as average survey completion time. In addition to minor revisions, suggestions encompassed adding other rehabilitation professionals (e.g., job coaches, job readiness specialists, vocational evaluators); including a question regarding perceived factors that undermine successful self-employment of PWD; and exploring educational aspects of PWD pursuing self-employment, meriting future inquiry.

The VRC-SEPS consists of 15 demographic questions and 26 questions divided among four scales measuring client characteristics consistent with self-employment success along with the experiences, perceptions, and readiness of counselors to help in self-employment pursuits. First, participants are asked to identify the top three characteristics from a list of 10 identified in the literature. Secondly, via a scale patterned after Ravesloot and Seekins' (1996) attitude scale, participants are presented 12 dichotomous adjective pairs (e.g., inefficient-efficient, unsuccessful-successful, complex-simple) on a 6-point numeric scale to describe how counselors "*usually feel about self-employment as a vocational rehabilitation strategy*" (p. 192). Thirdly, counselor experiences were assessed using six statements oriented via a 6-point Likert-type scale whereby participants indicated, "*strongly disagree*" to *strongly agree*." Statements like, "*My past experiences with or observations with or observations of self-employment as a rehabilitation strategy has been positive*," were asked to investigate counselor experience and readiness towards self-employment further. Similarly, counselor readiness is accessed via a scale with seven items covering elements such as training, business knowledge, and willingness to help in self-employment. The last question of the VRC-SEPS is an open-ended question providing counselors the opportunity to share anything else desired regarding self-employment. While the VRC-SEPS also contains scales measuring the experiences and readiness of counselors regarding self-employment, the current study investigated perceptions and client characteristics.

Content validity of the scale was established via expert review of the instrument. The VRC-SEPS had a high level of internal consistency, as determined by a Cronbach's alpha of 0.92. The present study used only the Perceptions scale. Cronbach's alpha for the Perceptions scale was 0.91.

## Procedures

Participants for the current study were recruited following the vetting of the VRC-SEPS. The researchers obtained a database from CRCC consisting of a random sample ( $n = 1,525$ ) from the nearly 16,000 counselors working across the nation. The university's Institutional Review Board (IRB) and CRCC both reviewed and approved the study.

Recruitment emails with the online survey link were sent to invite counselors to participate in the study yielding 205 participants. After the initial email invitation, four reminder emails were sent based on Dillman et al.'s (2014) methods to improve response rate. The survey was available over a 3-week period. As an expression of appreciation, respondents were offered the opportunity to participate in a drawing for three \$50 Visa/MasterCard gift cards via a separate survey link unassociated with the research survey, also approved by the university's IRB.

Upon giving consent, participants completed the online survey. Data collection proceeded via the Qualtrics<sup>TM</sup> platform, after which, the researchers analyzed the data using SPSS software. The researchers applied descriptive and inferential statistics including  $t$  tests and analysis of variances (ANOVA).

## Data Analysis

Descriptive statistics were computed using Statistical Package for the Social Sciences (SPSS 25.0). Inferential statistics were used to compare means between groups to determine the presence of significant differences at the .05 level of significance via  $t$  tests and ANOVA. The validity of the instrument was determined using correlational analysis.

## RESULTS

### Perceptions of VRCs

The first research question examined the perceptions of VRCs regarding self-employment via dichotomous adjective pairs anchored on opposite ends (using a six-point scale indicating negative to the left and positive to the right). For the purpose of analyzing, the researchers coded responses (1 = *very*, 2 = *moderately*, 3 = *slightly* [negative to the left]; 4 = *slightly*, 5 = *moderately*, 6 = *p* [positive to the right]). Participants were asked, “On the scale below, please click how you usually feel about self-employment as a closure option from the following adjective pairs.” Descriptive and inferential statistics were used to evaluate the views or perceptions of VRCs regarding self-employment as a closure option.

**Descriptive Statistics.** Mean scores were calculated on the perception items. The strongest positive perceptions ( $M = 4.43$ ,  $SD = 1.28$ ) were seen regarding self-employment as a flexible closure option. When collapsing the negative (aforementioned coded items 1–3) and positive (aforementioned coded items 4–6) flexibility choices, 75% of participants viewed self-employment as flexible. Specifically, participants reported self-employment was slightly flexible ( $M = 4.43$ ,  $SD = 1.28$ ), slightly positive ( $M = 3.94$ ,  $SD = 1.32$ ), slightly efficient ( $M = 3.85$ ,  $SD = 1.39$ ), and slightly successful ( $M = 3.72$ ,  $SD = 1.53$ ) option. Lastly, from the positive perspective, participants reported that self-employment as a closure option was slightly realistic ( $M = 3.59$ ,  $SD = 1.36$ ).

The most negative perception, as explored in the current study, reported by participants was related to the self-employment process as being one of moderate difficulty ( $M = 2.34$ ,  $SD = 1.22$ ). When collapsing the responses, 79.5% reported to some degree that self-employment as a closure option was arduous. Specifically, participants reported that the self-employment process was moderately difficult ( $M = 2.34$ ,  $SD = 1.22$ ), complex ( $M = 2.38$ ,  $SD = 1.24$ ), and moderately slow ( $M = 2.46$ ,  $SD = 1.24$ ). Further, VRCs indicated that the self-employment process was slightly risky ( $M = 2.87$ ,  $SD = 1.54$ ), slightly confusing ( $M = 3.34$ ,  $SD = 1.33$ ), and only slightly familiar ( $M = 3.42$ ,  $SD = 1.36$ ). See Table 2 for details.

**Inferential Statistics.** In order to determine differences among groups, inferential statistics were employed. Several significant differences were found among groups regarding perceptions or views of VRCs based on the following grouping variables: educational level, disability status, time worked as VRC, full- or part-time status, past self-employment status, current self-employment status, and work sector. No significant differences were found based on age, gender, ethnicity, or geographic area (urban/rural).

**Differences by Educational Level.** Games–Howell post hoc analysis revealed that significant differences in perceptions were found between groups by educational level (1 = Bachelors, 2 = Masters, 3 = Doctoral) on five of the pairs. Participants with doctoral degrees viewed self-employment more positively than those with master’s degrees in the following: efficient ( $p = .000$ ); successful ( $p = .008$ ); and realistic ( $p = .052$ ). In terms slow/fast ( $p = .021$ ), master’s level participants indicated self-employment as moderately slow, while doctoral level participants indicated it as slightly fast. Refer to Table 3 for details.

**Differences by Disability Status.** A Welch  $t$  test was run to determine if there were differences based on disability status (1 = Disability, 2 = No Disability). While the mean scores indicate that participants with or without disabilities mostly saw self-employment as a confusing, complex, and slow process, participants without disabilities saw the process more positively than those with disabilities in terms of clarity  $t(196) = -2.25$ ,  $p = .026$ ,  $d = .034$ , complexity  $t(197) = -1.957$ ,  $p = .038$ ,  $d = .302$  and speed  $t(148) = -2.05$ ,  $p = .049$ ,  $d = .030$ . Refer to Table 4 for details.

**TABLE 2. Frequencies of Perceptions Scale (Matched Pairs)**

Negative Adjectives	<i>M</i> ( <i>SD</i> )	Total Negative Percent		Very (1)		Moderately (2)		Slightly (3)		Total Positive Percent		Slightly (4)		Moderately (5)		Very (6)	
		<i>n</i>	(%)	<i>n</i>	(%)	<i>n</i>	(%)	<i>n</i>	(%)	<i>n</i>	(%)	<i>n</i>	(%)	<i>n</i>	(%)	<i>n</i>	(%)
Inflexible	4.43 (1.28)	7	3.4	6	2.9	31	15.1	50	24.4	58	28.3	45	22.0	45	22.0	45	22.0
Negative	3.94 (1.32)	8	3.9	21	10.2	38	18.5	64	31.2	38	18.5	27	13.2	38	18.5	27	13.2
Inefficient	3.85 (1.39)	12	5.9	23	11.2	37	18.0	58	28.3	38	18.5	26	12.7	38	18.5	26	12.7
Unsuccessful	3.72 (1.53)	16	7.8	34	16.6	42	20.5	53.1	25.5	37	18.0	32	15.6	37	18.0	32	15.6
Unrealistic	3.59 (1.36)	14	6.8	28	13.7	51	24.9	51.3	24.9	27	13.2	20	9.8	27	13.2	20	9.8
Unfamiliar	3.42 (1.36)	20	9.8	32	15.6	46	22.4	48.3	23.4	33	16.1	11	5.4	33	16.1	11	5.4
Confusing	3.34 (1.33)	20	9.8	34	16.6	48	23.4	46.8	23.4	19	9.3	13	6.3	19	9.3	13	6.3
Risky	2.87 (1.54)	44	21.5	54	26.3	36	17.6	32.3	15.6	18	8.8	16	7.8	18	8.8	16	7.8
Expensive	2.84 (1.22)	30	14.6	50	24.4	60	29.3	28.9	21.0	12	5.9	4	2.0	12	5.9	4	2.0
Slow	2.46 (1.24)	46	22.4	75	36.6	38	18.5	20.1	13.2	10	4.9	4	2.0	10	4.9	4	2.0
Complex	2.38 (1.24)	52	25.4	71	34.6	40	19.5	17.0	10.7	8	3.9	5	2.4	8	3.9	5	2.4
Difficult	2.34 (1.22)	59	28.8	65	31.7	39	19.0	18.1	13.7	5	2.4	4	2.0	5	2.4	4	2.0

*N* ranged from 194 to 201.

**TABLE 3. Significant Differences in Perceptions between Groups by Educational Level**

Adjective Pairs	(Group 2) Masters		(Group 3) Doctoral		<i>p</i>
	<i>M</i>	( <i>SD</i> )	<i>M</i>	( <i>SD</i> )	
Inefficient/Efficient	3.77	(1.40)	5.10	(.74)	.000 (2&3)
Unsuccessful/Successful	3.66	(1.54)	4.90	(0.99)	.008 (2&3)
Unrealistic/Realistic	3.52	(1.35)	4.70	(1.34)	.052 (2&3)
Slow/Fast	2.37	(1.20)	3.70	(1.25)	.021 (2&3)

**TABLE 4. Significant Differences in Perceptions between Groups by Disability Status**

Adjective Pairs	(Group 1) Disability		(Group 2) No Disability		<i>p</i>
	<i>M</i>	( <i>SD</i> )	<i>M</i>	( <i>SD</i> )	
Confusing/Clear	3.04	(1.33)	3.49	(1.31)	.026
Complex/Simple	2.15	(1.06)	2.51	(1.31)	.038
Slow/Fast	2.22	(1.14)	2.58	(1.27)	.049

### Disability Status

**Differences by Time as VRC.** VRCs significantly differed ( $p = .016$ ) in their perceptions based on time worked as a VRC and the matched pair of slow/fast. Participants with 11–15 years of experience ( $M = 2.17$ ,  $SD = 0.97$ ) as VRCs differed from those with 20 or more years of experience ( $M = 2.98$ ,  $SD = 1.31$ ) regarding the time progression of the self-employment. Those with less experience indicated moderately slow, whereas their more experienced counterparts saw self-employment as slightly slow.

**Differences by Full/Part-Time Work Status.** Significant differences were found in perceptions regarding full or part-time work status (1 = Full-Time, 2 = Part-time). Counselors working full-time viewed the process of self-employment less efficient ( $M = 3.79$ ,  $SD = 1.41$ ) than those working part-time ( $M = 4.56$ ,  $SD = 1.03$ );  $t(192) = -2.15$ ,  $p = .030$ ,  $d = .062$ . Counselors working full-time perceived the self-employment process as moderately slow ( $M = 2.40$ ,  $SD = 1.23$ ) compared to those working part-time who saw it as slightly slow ( $M = 3.19$ ,  $SD = 1.31$ );  $t(198) = -2.49$ ,  $p = .014$ ,  $d = .690$ . Counselors working full-time perceived self-employment slightly positive ( $M = 3.87$ ,  $SD = 1.33$ ) compared to those working part-time who felt it was moderately positive ( $M = 4.69$ ,  $SD = 1.01$ );  $t(194) = -2.40$ ,  $p = .017$ ,  $d = .690$ . Overall, counselors working full-time viewed the self-employment process more negatively than part-time professionals.

**Differences by Past Self-Employment Status.** Five significant perception differences were found among VRCs based on their own past self-employment status (1 = No, 2 = Yes). Counselors with past self-employment experience saw the process more efficient ( $M = 4.16$ ,  $SD = 1.37$ ) than counselors without self-employment ( $M = 3.63$ ,  $SD = 1.37$ );  $t(192) = 2.67$ ,  $p = .008$ ,  $d = .390$ . Those with self-employment experience ( $M = 3.57$ ,  $SD = 1.31$ ,  $p = .040$ ) saw the process as less confusing than those without self-employment experience ( $M = 3.17$ ,  $SD = 1.33$ );  $t(196) = 2.07$ ,  $p = .040$ ,  $d = .030$ . Counselors with self-employment experience ( $M = 2.65$ ,  $SD = 1.37$ ,  $p = .010$ ) perceived the process as less complex than those without self-employment

experience ( $M = 2.19, SD = 1.10$ );  $t(196) = 2.61, p = .061, d = .037$ . Counselors with self-employment experience viewed the process as less slow ( $M = 2.93, SD = 1.37$ ) than those without self-employment experience ( $M = 2.13, SD = 1.01$ );  $t(198) = 4.75, p = .000, d = .067$ . Additionally, while both groups viewed self-employment as slightly positive, counselors with self-employment experience viewed the self-employment process as more positive ( $M = 4.19, SD = 1.32$ ) than their counterparts with no personal self-employment experience ( $M = 3.75, SD = 1.29$ );  $t(194) = 2.34, p = .020, d = .340$ .

**Differences by Current Self-Employment Status.** Significant differences were also found in perceptions between counselors who were currently self-employed versus those who were not self-employed. Counselors who were self-employed perceived self-employment as slightly clearer ( $M = 3.88, SD = 1.41$ ), whereas counselors who were not self-employed perceived self-employment as slightly confusing ( $M = 3.16, SD = 1.26$ );  $t(196) = 3.42, p = .001, d = .540$ . Self-employed counselors perceived self-employment as slightly complex ( $M = 2.78, SD = 1.49$ ) while counselors who were not employed saw self-employment as moderately complex ( $M = 2.25, SD = 1.12$ );  $t(68.63) = 2.31, p = .024, d = .400$ . While all counselors perceived self-employment as a slow process, self-employed counselors saw the process as slightly slow ( $M = 3.14, SD = 1.39$ ), whereas counselors who were not self-employed saw the process as moderately slow ( $M = 2.23, SD = 1.10$ );  $t(198) = 4.73, p = .000, d = .730$ . In terms of clarity, complexity, and speed, in each comparison, counselors with previous or current self-employment experience viewed self-employment as a closure option in a more positive light.

**Differences by Work Sector.** ANOVA comparisons with Games–Howell post hoc tests revealed significant differences in perceptions among counselors working in various sectors (for-profit, nonprofit, government agency) regarding efficiency ( $p = .009$ ), flexibility ( $p = .004$ ), realistic ( $p = .032, .028$ ), clarity ( $p = .031, .001$ ), simplicity ( $p < .001$ ), and time ( $p = .053, .000$ ) of self-employment as a closure option. Counselors working in the for-profit sector were more positive in each of the matched pair descriptors. Counselors working in private practice reported perceiving self-employment more efficient ( $M = 4.38, SD = 1.47$ ), clearer ( $M = 4.12, SD = 1.11$ ), and faster ( $M = 3.62, SD = 1.30$ ) than counselors working in other settings. Overall, counselors varied in perceptions with counselors working in for-profit and private practice viewing self-employment more positively. See Table 5 for additional details regarding work sector. See Table 6 for details regarding work-setting differences.

**TABLE 5. Significant Differences in Perceptions between Groups by Work Sector**

Adjective Pairs	(Group 1) For-Profit		(Group 2) Nonprofit		(Group 3) Gov. Agency		<i>p</i>
	<i>M</i>	( <i>SD</i> )	<i>M</i>	( <i>SD</i> )	<i>M</i>	( <i>SD</i> )	
Inefficient/Efficient	4.38	(1.38)			3.68	(1.34)	.009 (1&3)
Inflexible/Flexible	4.88	(1.11)			4.24	(1.27)	.004 (1&3)
Unrealistic/Realistic	4.04	(1.26)	3.12	(1.22)	3.48	(1.37)	.032 (1&2) .028 (1&3)
Confusing/Clear	3.96	(1.26)	3.06	(1.12)	3.14	(1.32)	.031 (1&2) .001 (1&3)
Complex/Simple	2.98	(1.39)			2.17	(1.10)	.001 (1&3)
Slow/Fast	3.31	(1.29)	2.44	(1.21)	2.16	(1.07)	.053 (1&2) .000 (1&3)

**TABLE 6. Significant Differences in Perceptions Between Groups By Work Setting**

Adjective Pairs	(Group 1) Business/ Industry		(Group 4) College/ University		(Group 5) State/ County/ City Gov.		(Group 7) Insurance Company		(Group 8) Self- Employed/ Private Practice		<i>p</i>
	<i>M</i>	( <i>SD</i> )	<i>M</i>	( <i>SD</i> )	<i>M</i>	( <i>SD</i> )	<i>M</i>	( <i>SD</i> )	<i>M</i>	( <i>SD</i> )	
Inefficient/Efficient			3.26	(1.48)					4.38	(1.47)	.026 (4&&8)
Confusing/Clear			2.97	(1.22)	3.20	(1.33)			4.12	(1.11)	.022 (4&&8)
Slow/Fast	3.20	(1.21)			2.05	(0.98)	1.60	(0.90)	3.62	(1.30)	.045 (5&&8)
											.004 (1&&5)
											.000 (4&&8)
											.000 (5&&8)
											.004 (7&&8)

**TABLE 7. Frequency of Desired Client Characteristics**

Characteristic	<i>n</i>	%	Characteristic	<i>n</i>	%
Good Organizational Skills	117	(57.1)	Intelligence	37	(18.0)
Persistence	104	(50.7)	Enthusiasm	29	(14.1)
Business Planning Ability	93	(45.4)	Pleasing Personality	5	(2.4)
Past Experience with the Type of Business Being Considered	68	(33.2)	Other: Good support network/system	2	(1.0)
Good Social Skills	61	(29.8)	Other: Computer Skills	1	(0.5)
Comfortable with Risk-Taking	49	(23.9)	Other: Good Mentor	1	(0.5)
Personal Financial Backing	46	(22.4)			

**Note.** Participants selected top three choices. *N* ranged from 1 to 117.

### Desirable Client Characteristics

The second research question of the study: “What are the most desirable client characteristics for VRC consideration of self-employment of PWD?” simply sought to understand the personal attributes VRCs see as most amenable to self-employment closure. Previously explored in the business literature, desirable client characteristics were parsimoniously analyzed via descriptive statistics. Participants were asked to “choose three (3) characteristics from the following list that you feel are the most important for potential self-employed people with disabilities to possess.” The three characteristics most reported by VRCs were good organizational skills ( $n = 117$ , 57.1%), persistence ( $n = 104$ , 50.7%), and business planning ability ( $n = 93$ , 45.4%). See Table 7 for the entire list of desired client characteristics.

## DISCUSSION

### VRC Perceptions

Inspired by Ravesloot and Seekins' (1996) inquiry into counselor attitudes regarding self-employment, researchers of the current study sought to understand how VRCs perceive self-employment as a closure option. While several statistical differences were found among groups, overwhelmingly, VRCs characterized self-employment as a closure option as slow, complex, and difficult. Nearly 80% of VRCs saw self-employment as difficult. Similarly, nearly 80% of VRCs viewed self-employment as a complicated process and 78% of VRCs saw the self-employment process as slow. Overall, VRCs saw self-employment just as negatively (confusing, risky, expensive, slow, complex, and difficult) as they did positively (flexible, efficient, successful, realistic, and familiar). It appears that while VRCs can see the potential of self-employment, they believe it is difficult and costly. These results are aligned with VRCs' reported concerns regarding the possibility of business failure and variable income potential (Colling & Arnold, 2007).

Significant statistical differences were found on seven independent variables including: educational level, disability status, time worked as VRC, full- or part-time status, past self-employment status, current self-employment status, and work sector. Regarding education, VRCs with a master's degree saw self-employment as significantly less positive than those with

a doctoral degree in five areas. Whereas Master's level VRCs saw the process as slightly confusing and moderately slow, those with doctoral degrees saw the process oppositely. Differences in perceptions among these groups could be attributable to their educational training and workflow expectations. Customarily, doctoral level professionals are more apt to work in leadership roles with broader, more realistic perspectives related to time continuums and work flow. Comparatively, Master's level professionals often address more immediate day-to-day occurrences and clients' urgencies; possibly contributing to their seeing self-employment as confusing and slow.

Individuals with insider perspectives (Louis & Bartunek, 1992) may have experiences with phenomena of interest and may offer unique insights. Counselors with disabilities in the current study provided insider perspectives related to disability and self-employment and offered differing views. Regarding disability status, counselors with disabilities were more negative than those without. They appeared to be less hopeful, viewing the process as more complicated and time consuming. In addition to their work experiences, perhaps previous disenfranchising life and personal experiences have informed their views of the self-employment process for PWD. Counselors with self-employment experiences also offered insider perspectives, finding the process more positive in terms of clarity, simplicity, and pace. Perhaps having first-hand self-employment experience makes the process seem more attainable and less intimidating.

Differences were also found related to both employment sector and work status (full/part-time). VRCs working in for-profit settings viewed self-employment as flexible and realistic, whereas those in nonprofit and governmental settings saw self-employment as inflexible and unrealistic. Differences of this type may be attributable to the manner in which different sectors approach work, resourcing, and outcomes. Pressure associated with timely case closure and restrictive policies (e.g., work restrictions and financial limitations; Ipsen & Swicegood, 2017) may create frustration and increase negative outlooks (Yamamoto & Olson, 2016). Similarly, counselors working full-time may experience more pressure, as they saw the self-employment process as less efficient and less positive.

### **Client Characteristics**

The researchers also explored the desirable client characteristics considered by VRCs as necessary for self-employment success. Participants of the current study ( $n = 205$ ) choose three characteristics from a list of 10 characteristics prevalent in successful self-employment. Aligned with business literature that identified characteristics among self-employed people without disabilities, in this study, counselors identified good organizational skills ( $n = 117$ , 51.1%), followed by persistence ( $n = 104$ , 50.7%) and business planning ability ( $n = 93$ , 45.4%) among self-employed PWD.

Consistent with previous research regarding entrepreneurial characteristics, top qualities named by participants of the current study are among those identified by previous empirical inquiry. Roodt (2005) identified organizational and business planning skills (technical skills, perseverance, communication skills, managerial skills, leadership, innovation, pro-activity, financial skills, and information-seeking skills) as present among individuals in the general population with plans to pursue self-employment. In their quest to provide greater insight regarding the continuance of self-employment versus self-employment termination, Patel and Thatcher (2014) explored the crucial role of persistence among nearly 3,000 individuals in the general population via employment data spanning nearly 50 years. The authors concluded that individual attributes such as calmness, openness to experience, and autonomy all contributed to persistence, which is crucial to the viability and continuity of self-employment endeavors.

Therefore, identifying characteristics in PWD that support self-employment success and assessing interest in self-employment during initial employment screenings may increase the number of candidates who could pursue self-employment. This expansion of prospective candidates facilitates possible self-employment closures, ultimately increasing independence and livable wage opportunities for PWD.

While the findings of this study provide insight regarding how VRCs approach self-employment and contribute to the literature, there are several limitations to consider. First, as likely with self-reported data, participants may have answered questions in a socially desirable manner. Second, Bonferroni adjustments were not implemented for the *t* test comparisons. While forgoing the Bonferroni adjustments increases the possibility of Type I errors, it decreases the probability of overlooking differences that exist between groups (see Perneger, 1998 for additional information), preferred due to the exploratory nature of the current study. Third, dichotomous adjectives, urban/rural geographical location, as well as full/part-time status, were self-defined by participants. These definitions could vary responses. Lastly, as the current study was quantitative, it did not gather detailed, illustrative qualitative data that facilitates depth of understanding.

### **Concluding Thoughts and Recommendations**

Self-employment is a viable option with significant importance for PWD, providing an avenue for thriving and independence (Schriner & Neath, 1996). While PWD are twice as likely to be self-employed than members of the general population, this enduring phenomenon is not mirrored in VR where self-employment is rarely achieved. The current study has several implications for VRCs, professionals, educators, and researchers. Dialogue is needed to advance self-employment among PWD and assist in their endeavors of independence and self-sufficiency (Bertels, 2018; Dhar & Farzana, 2017; Maziriri et al., 2017). As advocates for PWD in self-employment, VRCs could facilitate nationwide and global conversations (Hinrichs et al., 2004). Negative perceptions among VRCs regarding self-employment potentially undermine these conversations. Following are recommendations from the current study to provide support and professional development to VRCs who indicated deficits in skills and business knowledge to facilitate self-employment among PWD:

- Additional educational programming at both undergraduate and graduate levels to improve self-employment perceptions among VRCs.
- Professional development to provide skills and increase efficacy related to business strategies, evidenced-based practices, innovations, and technological advancements.
- Self-employment mentoring experiences where VRCs and professionals with self-employment experience (previous or current) serve as mentors to those without self-employment backgrounds.
- Collaboration between VRCs and business sector members to provide VRCs opportunities to gain business knowledge and training.
- Consistent VRC performance of prescreening to assess for client characteristics aligned with self-employment (i.e., good organizational skills, persistence, and business planning ability).

Additional research is recommended as a result of the current study. While researchers have investigated facets regarding self-employment among PWD, related research within the field of rehabilitation is evolving. Beginning in the mid 1990s continued by Switzer Scholars and progressing with recent inquiry, self-employment research specific to PWD holds potential to positively impact the well-being of PWD (Arnold et al., 1995; Schriner & Neath, 1996).

Future research opportunities include the following: qualitative inquiry to understand phenomena related to how VRCs view self-employment; inquiry to discover differences in rural and urban self-employment among PWD; and VRC capabilities to assist clients with self-employment.

Finally, increasing conversations regarding self-employment for PWD, creating self-employment mentorship situations within VR, and utilizing related research opportunities, may increase the number of PWD that become self-employed through VR. As 80% of VRCs in this study perceived the self-employment process as difficult, creating a culture among VRCs that values self-employment as an avenue to independence will engender enthusiasm for self-employment as a closure option, and ultimately, improve the lives of PWD.

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