

# Gender differences in access and intervention outcomes: the case for women with disabilities

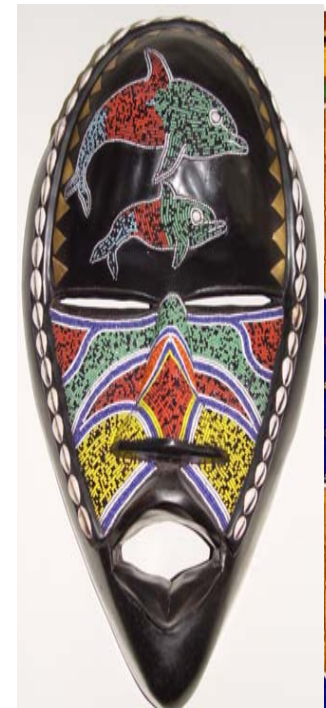
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# Background

- There are 28 million women living with disabilities in the U.S.
- People with disabilities experience employment barriers resulting in high poverty rates
- Women experience higher disability than do men
- Women with disabilities face a double employment jeopardy



# Study objectives

To determine gender differences in:

- Access to VR
- Intervention outcomes



# Data Source

- RSA-911 data – from the Rehabilitation Services Administration
- Case management data recorded in the process of service access/delivery by the state Vocational Rehabilitation Services Agencies
- demographics, education, employment, earnings at application and at closure
- Types of services rendered
- Reasons and Types of closure



# Study Methods

- Analysis about 6000,000 cases that were closed by VR in 2004
- Analysis of employment, earnings, educational levels at application and at closure, types of services rendered and VR intervention outcomes
- T test is used to test the statistical significance of gender differences



# Disability differences

- Greater proportions of men had mental impairments
- Greater proportions of Women had visual impairments
- For both men and women greatest number of disabilities were due to physical impairments



# Disability Frequencies

Primary Disabilities	% of Men	% of Women	t	df
Visual	4.47	5.32	-15.89	607413.76
hearing	56.37	55.46	2.44	70680.10
Physical	83.77	82.62	7.48	230853.32
Mental	64.89	62.11	21.05	513467.19
Secondary Disabilities				
visual	3.13	3.15	-0.24	154556.00
hearing	68.48	67.00	1.91	13493.37
physical	89.02	91.67	-14.47	102749.62
mental	39.06	38.63	2.72	363629.71



# Results

- Service provision to women was less timely than for men
- Women waited for longer periods for determinations of eligibility and for their individualized programs of employment (IPE)



# Waiting Periods (days)

	Female	Male	Mean Diff	95% Confidence Interval of the Difference		t	df
	Mean	Mean		Upper	Lower		
Age at application	36.366	34.802	-1.56	-1.63	-1.50	-46.04	653196.00
Application to eligibility	43.646	42.341	-1.30	-1.64	-0.97	-7.64	537612.00
Application to IPE	113.792	107.644	-6.15	-7.91	-4.39	-6.85	365650.08
IPE to closure	662.509	619.078	-43.43	-47.45	-39.41	-21.16	369503.77
Type of Closure	3.798	3.828	0.03	0.02	0.04	6.15	632221.71
Reason for Closure	3.769	3.715	-0.05	-0.08	-0.03	-5.00	625260.31



# Differences in Services Rendered

- Greater proportion of the men received college/university training, vocational/occupational training, rehabilitation technology, and more training for disability related augmentative skills
- Greater proportions of the women received job-readiness training, on-the-job support, job-placement assistance and job search assistance

# Service Rendered

Service Provided	% of men	% of women	t	df
Diagnosis & Treatment	71.74	69.81	-12.06	626964.19
College or University Training	92.46	90.65	-23.60	598668.66
Occupational/Vocational Training	91.94	90.99	-12.38	614988.95
Basic Academic Remedial or Literacy	99.18	99.07	-4.28	611741.61
Job Readiness Training	92.6	93.39	11.43	641385.20
Disability Related Augmentative Skills	98.05	97.43	-13.84	603190.88
Miscellaneous Training	93.46	93.07	-5.24	624532.37
Job Search Assistance	83.65	84.66	9.42	634228.82
Job Placement Assistance	82.36	83.62	12.43	636635.52
On-the-job Supports	90.52	91.53	12.94	639988.57
Maintenance	91.45	91.1	-6.77	619338.69
Rehabilitation Technology	95.68	94.69	-16.08	610085.53
Technical Assistance	97.36	97.08	-5.59	620287.84
Other services	85.5	84.84	-7.29	623887.59



# Education

- At application, greater proportions of men had special education and high school certificates while women had more of the higher level education diplomas
- At closure, more women had associate, bachelors and master's degrees than did the men
- Note that these differences are statistically significant

# Education Levels at Application

	Female	Male	Mean Diff	95% Confidence Interval of the Difference		t	df
	Mean	Mean		Upper	Lower		
Special education	0.060	0.071	0.01	0.01	0.01	18.39	640256.62
High school graduate	0.381	0.391	0.01	0.01	0.01	8.35	626233.36
Associate degree or Vocational-Technical	0.069	0.051	-0.02	-0.02	-0.02	-30.85	583289.73
Bachelor's degree at application	0.048	0.040	-0.01	-0.01	-0.01	-14.91	602803.49
Master's degree or higher at application	0.014	0.012	0.00	0.00	0.00	-9.70	596148.12

# Education Levels at Closure

	Female	Male	Mean Diff	95% Confidence Interval of the Difference		t	df
	Mean	Mean		Upper	Lower		
Special education certificate	0.066	0.081	0.01	0.01	0.02	22.13	604996.99
High school graduate	0.396	0.425	0.03	0.03	0.03	23.17	591534.50
Associate degree or Vocational-Technical	0.105	0.080	-0.02	-0.03	-0.02	-32.41	558085.40
Bachelor's degree	0.070	0.055	-0.02	-0.02	-0.01	-23.99	559989.25
Master's degree +	0.020	0.015	0.00	-0.01	0.00	-13.57	554476.93

# Proportions in different education levels

Education level at application	%of the men	% of the women	T	df
Special Education Certificate	7.11	5.98	18.39	640256.62
High school graduate or equivalency certificate	39.11	38.09	8.35	626233.36
Associate degree or Vocational-Technical Certificate	5.07	6.90	-30.85	583289.73
Bachelor's degree	4.00	4.77	-14.91	602803.49
Master's Degree+	1.16	1.43	-9.70	596148.12
<b>Education level at closure</b>				
Special Education Certificate	8.06	6.58	22.13	604996.99
High school graduate or equivalency certificate	42.53	39.60	23.17	591534.50
Associate degree or Vocational-Technical Certificate	8.04	10.47	-32.41	558085.40
Bachelor's degree	5.54	7.05	-23.99	559989.25
Master's Degree+	1.51	1.97	-13.57	554476.93





# Employment and Earnings

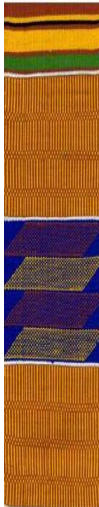
- The higher educational levels did not translate into higher employment or earnings
- At application men earn \$1.09 per week more than women
- At closure men earn \$50.61 per week more than the women
- At application, women work 42 hrs more per week but at closure, they work 2.98 hrs per week less than the men
- Note that the differences in earnings and in hours worked per week are statistically significant

# Employment and Earnings

	Female	Male	Mean Diff	95% Confidence Interval of the Difference			
<b>At application</b>	Mean	Mean		Upper	Lower	t	df
Employment Status	8.63	8.94	0.31	0.29	0.33	33.51	605870.40
Weekly Earnings	51.34	52.43	1.09	0.36	1.82	2.93	640283.67
Hours Worked in a Week	5.81	5.39	-0.42	-0.48	-0.36	-13.28	619535.12
<b>At Closure</b>							
Employment Status	1.72	1.70	-0.01	-0.03	0.00	-1.54	213741.00
Weekly Earnings	284.25	334.86	50.61	48.68	52.54	51.36	213402.23
Weekly Hours Worked	29.96	32.94	2.98	2.88	3.08	58.44	199340.10



# Dependence on Public Support

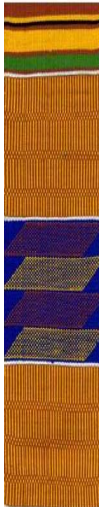
- Both at application and closure, women are more dependent on TANF and SSI than are the men
  - Men are more dependent of SSDI – another indication of men’s higher employment
  - Also notable: the TANF and SSI gaps narrow at closure but the SSDI gap grows at closure
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# Monthly Public Support (Dollars)

	Female	Male	Mean Diff	95% Confidence Interval of the Difference			
<b>At Application</b>	Mean	Mean		Upper	Lower	t	df
\$SSDI	77.730	85.253	7.52	6.33	8.71	12.38	647002.24
\$SSI	77.633	70.699	-6.93	-7.89	-5.98	-14.19	622100.39
\$ TANF	19.297	4.703	-14.59	-14.95	-14.24	-80.57	429470.68
\$ Other Public Support	60.614	67.238	6.62	5.44	7.81	10.95	649689.51
<b>At Closure</b>							
\$ SSDI	85.700	95.071	9.37	8.10	10.64	14.45	635566.40
\$ SSI	75.576	67.560	-8.02	-8.97	-7.07	-16.56	609941.18
\$ TANF	13.003	3.090	-9.91	-10.22	-9.61	-64.14	408209.24
\$ Other Public Support	34.924	37.276	2.35	1.43	3.28	4.98	625568.02



# Health Insurance

- At application, greater proportions of women were dependent on Medicare, Medicaid and employment-based insurance.
  - At closure there is no change except that greater proportions of men are dependent on employment-based insurance – another indication of better employment outcomes for men than for women
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# Health Insurance

	Female	Male	Mean Diff	95% Confidence Interval of the Difference		t	df
	Mean	Mean		Upper	Lower		
<b>At Application</b>							
Medicaid	0.284	0.227	-0.06	-0.06	-0.05	-52.07	605761.43
Medicare	0.100	0.092	-0.01	-0.01	-0.01	-10.80	615832.08
Other Public Insurance	0.028	0.033	0.01	0.00	0.01	12.01	640316.25
Own Employment-based	0.060	0.052	-0.01	-0.01	-0.01	-12.97	608759.41
Other Private Insurance	0.177	0.175	0.00	0.00	0.00	-2.00	623882.38
<b>At Closure</b>							
Medicaid	0.250	0.200	-0.05	-0.05	-0.05	-47.03	570736.80
Medicare	0.098	0.090	-0.01	-0.01	-0.01	-10.62	581928.14
Other Public Insurance	0.025	0.028	0.00	0.00	0.00	8.11	603507.21
Own Employment-based	0.110	0.115	0.00	0.00	0.01	5.93	592778.83
Other Private Insurance	0.121	0.114	-0.01	-0.01	-0.01	-8.01	584125.73

# Closure types and reasons

- Greater proportions of women had employment outcomes
- Greater proportions of men closed for “failure to cooperate”
- Greater proportions of women closed for “refusing further services”



# Types of Closure

	Female	Male	Mean Diff	95% Confidence Interval of the Difference		t	df
	Mean	Mean		Upper	Lower		
Exited with an employment outcome	0.330	0.324	-0.01	-0.01	0.00	-4.31	628898.33
Exited without an employment outcome, after services	0.265	0.261	0.004	-0.01	0.00	-3.40	628757.15
Exited without an employment outcome, after a signed IPE, before receiving services	0.007	0.008	0.001	0.00	0.00	2.09	636360.55
Exited without an employment outcome, after eligibility, but before an IPE was signed	0.206	0.214	0.01	0.01	0.01	7.95	633007.24



# Types of closure

	% of Men	% of Women	t	df
Exited as an applicant	17.07	17.07	0.04	653204.00
Exited during or after a trial work experience or extended evaluation	0.73	0.73	0.14	653204.00
Exited without an employment outcome, after receiving services	26.11	26.48	-3.40	628757.15
Exited without an employment outcome, after a signed IPE, but before receiving services	0.75	0.71	2.09	636360.55
Exited from an order of selection waiting list	1.50	1.48	0.66	653204.00
Exited without an employment outcome, after eligibility, but before an IPE was signed	21.39	20.59	7.95	633007.24
Achieved employment outcome	32.45	32.95	-4.31	628898.33

# Reasons for Closure

	Female	Male	Mean Diff	95% Confidence Interval of the Difference		t	df
	Mean	Mean		Upper	Lower		
Failure to cooperate	0.136	0.148	0.01	0.01	0.01	14.13	637532.05
Unable to locate or contact	0.151	0.165	0.01	0.01	0.02	15.48	637546.49
Refused Services or Further Services	0.176	0.160	-0.02	-0.02	-0.01	-17.80	619916.68
No disabling condition	0.038	0.034	0.00	-0.01	0.00	-9.25	614926.91
Disability too significant to benefit from VR services	0.020	0.017	0.00	0.00	0.00	-8.84	608820.89
Individual in Institution/Transferred to another agency	0.017	0.027	0.01	0.01	0.01	27.12	652649.04

# Closure Reasons

	% of Men	% of Women	t	df
Achieved employment outcome	32.45	32.95	-4.31	628898.33
Failure to cooperate	14.84	13.62	14.13	637532.05
Unable to locate or contact	16.52	15.12	15.48	637546.49
Refused Services or Further Services	15.96	17.62	-17.80	619916.68
No disabling condition	3.39	3.82	-9.25	614926.91
Disability too significant to benefit from VR services	1.73	2.02	-8.84	608820.89
Individual in Institution/Transferred to another agency	2.67	1.70	27.12	652649.04



# Conclusion

- The analysis results indicate statistically significant access differences in quality of services and timeliness.
  - The differences translate into employment and earnings differences with men experiencing better outcomes than those of women
  - These findings suggest that men with disabilities stand a better chance of escaping poverty than do women with disabilities
  - There is a need for changes in VR service provision that ensures equity in quality of services
  - Such changes might translate into more equitable employment and earnings outcomes.
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