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Discouraged Workers in the Nonmetro

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Abstract

This paper explores the personal characteristics of those discouraged over job prospects. Microdata from the Current Population Survey, for three monthly periods, January 2020, January 2021, and January 2022, were compiled to gain insights into the discouraged worker. Results suggest that the number of discouraged workers has declined in the nonmetro, but has increased in the metro and during phase 4 of the Covid-19 pandemic, January 2021, more Blacks than Whites believed that they couldn't find work.

Introduction

The U.S. needs workers. Despite record openings and soaring demand, businesses claim they can't find workers (Ewall-Wice, CBS News, December 8, 2021)².

In an earlier *Research Brief*, I argued that retirement is impacting labor supply³. In this paper, the focus is on “discouraged workers”, those who are not currently looking for work because they believe: (i) there are no jobs available in their field of expertise; (ii) they lack the necessary schooling, training, or experience; (iii) employers think they are too young or too old, and (iv) they face some other

¹ Professor, Illinois Institute for Rural Affairs, Western Illinois University.

² <https://www.cbsnews.com/news/retirement-covid-pandemic-unretire-labor-shortage/>.

³ Athiyaman, A. (2022). Interpreting the Recent Decline in Illinois' Labor Force: April 2020 – December 2021, *Research Brief*, 4(2), January, 1-12. Available online: http://www.iira.org/wp-content/uploads/2022/01/RB42_LF_Final.pdf.

form of employment discrimination⁴. Data analysis involves three time periods: January 2020, pre Covid-19; phase 4 of the pandemic, January 2021⁵; and now, as at January 2022. The results of this research should be of interest to economic developers engaged in workforce development.

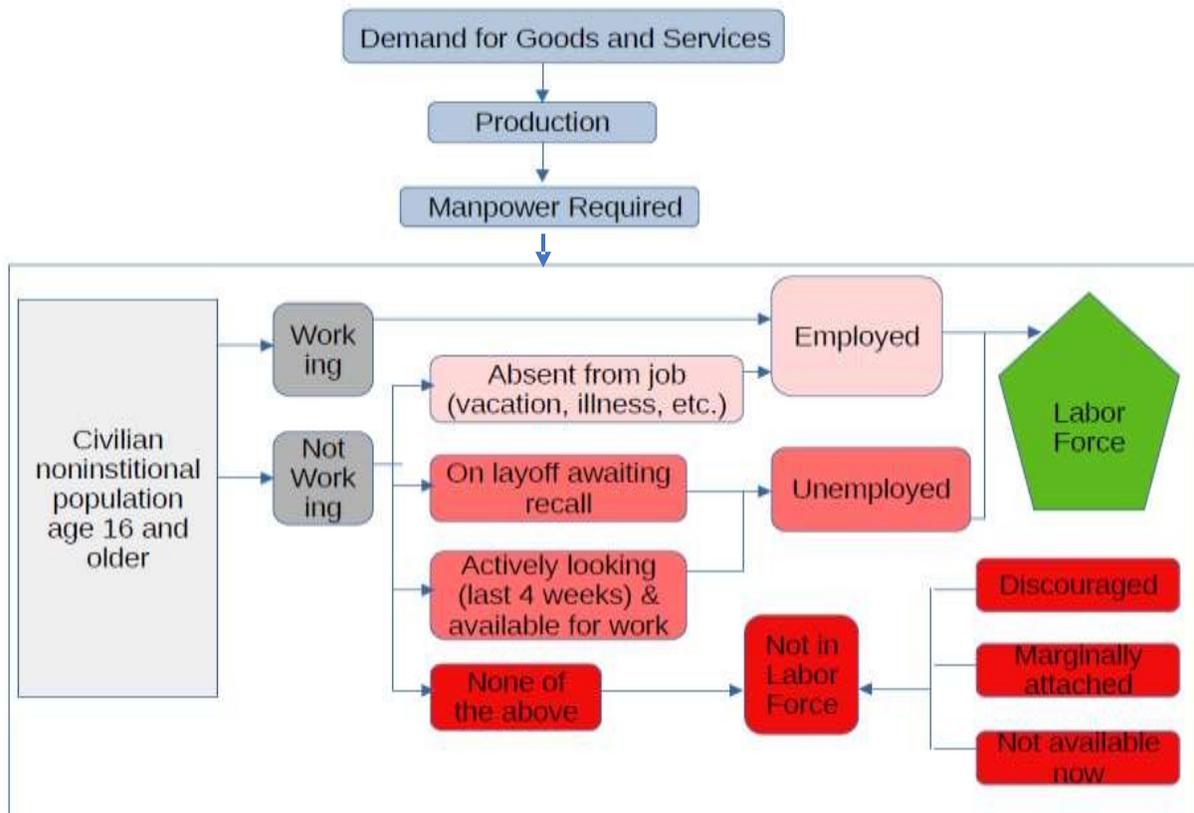
Labor Market Concepts

Labor market statistics often include three components: labor force participation, employment, and unemployment. Labor force participation for a geography is often expressed as the proportion of the

population that is employed and / or actively looking for work. The employment rate is the proportion of the population who are employed; the unemployment rate is the proportion of labor force participants not employed, but actively looking for work.

In order to assess labor underutilization, the Bureau of Labor Statistics classified those “not in labor force” based on their conditions, for example, not working because of family responsibilities, or discouraged over job prospects. The position of these segments or clusters of workers in a population is shown in Figure 1.

Figure 1: Labor Force Concepts



⁴ <https://www.bls.gov/cps/definitions.htm#discouraged>.

⁵ <https://coronavirus.illinois.gov/restore-illinois/phase-4.html>.

Methodology

Data are from the Current Population Survey (CPS). Conducted monthly, the CPS polls 60,000 households using telephone and in-person interviews. As shown in Figure 1, the survey is representative of civilian noninstitutional population age 16 and older in the 50 states and the District of Columbia⁶.

Microdata for three monthly periods, January 2020, January 2021, and

January 2022, were compiled. A total of 400,250 cases (rows of data) were processed for statistical analysis. Variables extracted to gain insights into discouraged worker characteristics include: residential location (metro versus nonmetro), race, gender, age, and education. Survey responses were weighted to be representative of the population. Table 1 lists the variables and their definitions.

Table 1: Operational Definitions

Variable in CPS	Operational Definition
GTMETSTA: Location	1 = Metro; 2 = Nonmetro
PTDTRACE: Respondent's race	1 = White; 2 = Black; ...; 4 = Asian
PESEX: Respondent's gender	1 = Male; 2 = Female
PRTAGE: Respondent's age	Numerical value: 0 to 79; 80 = 80 to 84; 85 = 85+
PEEDUCA: Level of education	1 = LT High school; ...; 5 = Bachelor's degree +
PEDWRSN: Criterion variable; main reason for not looking for work	1 = BELIEVES NO WORK AVAILABLE IN AREA OF EXPERTISE 2 = COULDN'T FIND ANY WORK 3 = LACKS NECESSARY SCHOOLING/TRAINING 4 = EMPLOYERS THINK TOO YOUNG OR TOO OLD 5 = OTHER TYPES OF DISCRIMINATION

⁶ See, <https://www.bls.gov/cps/documentation.htm#concepts>.

Findings

The number of discouraged workers has declined in the nonmetro, but has increased in the metro; the growth in the number of discouraged workers in the metro can be attributed to number of

business closures during the early days of Covid-19⁷. In general, rural residents were finding it difficult to get work, irrespective of external turbulences such as the Covid-19 pandemic (Table 2).

Table 2: Discouraged Workers: Metro versus Nonmetro

	Metro			Nonmetro		
	Jan 2020	Jan 2021	Jan 2022	Jan 2020	Jan 2021	Jan 2022
No work available	26%	24%	35%	29%	37%	9%
Couldn't find work	63	73	52	57	50	84
Lack necessary schooling	7	2	11	10	13	0
Employer thinks too young/old	5	1	2	4	0	0
Other discrimination	0	0	0	0	0	7
All, N; 100%	299,776	582,490	376,121	59,900	49,989	48,147
Growth rate, from '20 to '22		11%			-11%	

Note: $\chi^2 = 94.65$, $p < 0.05$.

Table 3 shows that one's race has no influence on one's beliefs about unemployment; during the pre-pandemic year, approximately the same proportion of Whites and Blacks believed that they couldn't find work in rural areas.

However, during phase 4 of the Covid-19 pandemic, January 2021, more Blacks than Whites believed that they couldn't find work⁸ and that they lack necessary schooling to get a job.

⁷ Athiyaman, A. (2021). Some Empirical Aspects of Manufacturing Sector During the Covid-19 Pandemic. *Rural Research Report*, Vol. 31, Issue 1, 1-16. Available online: <http://www.iira.org/wp->

[content/uploads/2021/02/RRR_Jan2021_Feb12.pdf](http://www.iira.org/wp-content/uploads/2021/02/RRR_Jan2021_Feb12.pdf).

Table 3: Impact of Race on Beliefs about Not Looking for Work

	2020		Nonmetro 2021		2022	
	White	Black	White	Black	White	Black
No work available	27%	24%	41%	25%	11%	0%
Couldn't find work	60	51	47	59	80	100
Lack necessary schooling	13	0	12	16	0	0
Employer thinks too young/old	0	24	0	0	0	0
Other discrimination	0	0	0	0	9	0
All, N; 100%	47,019	9,298	36,364	11,955	39,405	8,742

In order to build a profile of the discouraged workers, a four-way classification of discouraged workers was constructed (Table 4). First, the beliefs of the workers, the reasons for discouragement in finding employment, were dichotomized as internal and external factors. For example, any form of employment discrimination would be external; lack of schooling would be internal⁹. To this binary, criterion variable, race, gender, age, and education were added as explanatory variables.

The basic concepts of loglinear models, probability and odds, were computed to gain insights into Table 4; the results of statistical estimation suggest that:

- (i) The odds of internal attribution decrease with age: 3 to 1 for a person in the 16-65 age group, but less than 1 for > 65;
- (ii) The odds of internal attribution are higher for Black males than their White counterparts; odds for the former group are 14 to 1 and for the latter 1.5 to 1, and
- (iii) College educated males in the 16-65 age group tend to blame external or structural factors for lack of employment, probability of external attribution is 0.59.

⁸ These results converge with the findings from our earlier research on Covid-19 impacts; see, Athiyaman, A. (2021). Covid-19 Pandemic: Effects on Minority-Owned Businesses in Illinois. Research Brief, Short Paper, Vol. 3, No. 6 (April 6, 2021). Available online: [http://www.iira.org/wp-](http://www.iira.org/wp-content/uploads/2021/04/ResBrief6_Minority_Apr2021.pdf)

[content/uploads/2021/04/ResBrief6_Minority_Apr2021.pdf](http://www.iira.org/wp-content/uploads/2021/04/ResBrief6_Minority_Apr2021.pdf).

⁹ The internal factor had the following items: couldn't find work and lack necessary schooling. The external factors had three items: no work available, employer thinks too young / old, and other discrimination; sum of the items constituted the attributional factors.

Table 4: Contingency Table: Internal / External Attribution and Demographic Explanatory Variables

	White										Black						All		
	Female					Male					Female			Male					
	16-65			>65		16-65			>65		16-65		>65	16-65					
	LT HS	HS	College	HS	College	LT HS	HS	College	LT HS	HS	College	LT HS	HS	College	HS	College			
Internal	0	27863	2528	3519	4184	25418	51420	13195	5293	5321	8924	2811	12462	7378	5281	4750	65351	17250	262948
External	7661	9051	0	3679	0	14000	34583	19055	0	2087	3538	0	4689	0	0	0	4605	3840	106787
Total	7661	36915	2528	7198	4184	39418	86003	32251	5293	7408	12461	2811	17151	7378	5281	4750	69956	21089	369736

Analysis of Explanatory Variables, One at a Time

(i) Gender

	Nonmetro					
	2020		2021		2022	
	White	Black	White	Black	White	Black
No work available	25%	32%	53%	33%	0	12%
Couldn't find work	44	68	44	52	65	88
Lack necessary schooling	22	0	3	15	0	0
Employer thinks too young/old	8	0	0	0	0	0
Other discrimination	0	0	0	0	35	0
All, N; 100%	47,019	9,298	36,364	11,955	39,405	8,742

(ii) Age

	2020					2021					2022			
	16-24	25-34	35-44	45-64	65+	16-24	25-34	35-44	45-64	65+	16-24	25-34	35-44	45-64
No work available	10%	18%	61%	49%	0	28%	12%	54%	36%	100%	0	0	0	33%
Couldn't find work	55	82	39	51	100	44	80	41	53	0	100	100	81	67
Lack necessary schooling	35	0	0	0	0	27	7	4	11	0	0	0	0	0
Employer think too young/old	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other discrimination	0	0	0	0	0	0	0	0	0	0	0	0	19	0
All, N; 100%	17,891	9,111	12,107	13,234	3,356	12,406	4,712	10,617	21,383	871	9,950	6,386	18,228	13,582

(iii) Education

	2020					2021				2022			
	LT high school	High school	Some college	Associate degree	Bachelor's degree and higher	LT high school	High school	Some college	Bachelor's degree and higher	LT high school	High school	Some college	Associate degree
No work available	34%	28%	0	25%	100%	38%	25%	56%	100%	4%	0	30%	0
Couldn't find work	43	59	100	75	0	12	72	42	0	96	100	44	100
Lack necessary schooling	10	13	0	0	0	49	3	2	0	0	0	0	0
Employer think too young/old	13	0	0	0	0	0	0	0	0	0	0	0	0
Other discrimination	0	0	0	0	0	0	0	0	0	0	0	27	0
All, N; 100%	17,837	33,510	3,235	4,520	798	10,742	25,039	13,823	385	19,724	14,029	12,758	1,635

Summary and Conclusion

It could be said that applied research entails anticipating the issues of tomorrow, discernible as they are in the here and now¹⁰. Practitioners in community economic development predict structural unemployment as a result of digital and artificial intelligence innovations¹¹. So, what does data reveal about discouraged workers in the here and now?

- (i) The number of discouraged workers is declining in the nonmetro, but increasing in the metro;
- (ii) One's race has little or no influence on one's beliefs about unemployment, and
- (iii) Older workers attribute their discouraged worker status to external factors such as discrimination.

Today's world view, that puts the blame for unemployment largely on the individual, would suggest that motivation for job search is likely to be lacking in people attributing their discouraged worker status to external factors; Table 4 shows that around 29% of discouraged workers fit this description. Future research should explore the

psychological situation of the discouraged worker.

¹⁰ I tell this to my graduate students when asked about topics for applied projects.

¹¹ See, <https://www.brookings.edu/blog/techtank/2018/0>

[4/18/will-robots-and-ai-take-your-job-the-economic-and-political-consequences-of-automation/](https://www.brookings.edu/blog/techtank/2018/04/18/will-robots-and-ai-take-your-job-the-economic-and-political-consequences-of-automation/).