

Volume 42, Issue 3

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While the United States enjoys aggregate economic growth, the fruits are not shared equally across communities. While there has been numerous news coverage about the despair of US communities recently, there has been little empirical study the impact of third places on the level of despair. In this paper, we collect US county-level data for the years 2012 and 2017, and construct an index of despair for each county, with mean zero and a standard deviation of 1. We find that counties with higher levels of third spaces that allows social interactions have a lower level of despair. The result is stronger for counties with smaller population. This result remains robust under different specifications of the model. We explain this relationship by saying that third places allow more interactions with other individuals, and less need to indulge in self-destructive activities, which in turn reduces the level of despair in the county.

Citation: T M Tonmoy Islam and Thomas Tiemann, (2022) "Despairing Communities and third places", Economics Bulletin, Volume 42,

Issue 3, pages 1575-1590

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Submitted: March 29, 2022. Published: September 30, 2022.

Submission Number: EB-22-00270

Despairing Communities and Third Places

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Abstract

While the United States enjoys aggregate economic growth, the fruits are not shared equally across communities. While there has been numerous news coverage about the despair of US communities recently, there has been little empirical study the impact of third places on the level of despair. In this paper, we collect US county-level data and construct an index of despair for each county, with mean zero and a standard deviation of 1. We find that counties with higher levels of third spaces that allows social interactions have a lower level of despair, numerically, we find that a one standard deviation increase of associations per 10,000 people reduces the despair variable by 0.21 points. This result remains robust under different specifications of the model. We explain this relationship by saying that third places allow more interactions with other individuals, and less need to indulge in self-destructive activities, which in turn reduces the level of despair in the county.

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Despairing Communities and Third Places

1. Introduction

Forty years ago the outsourcing of American manufacturing, especially manufacturing that did not require highly skilled labor, was well underway. These manufacturing jobs were mainly established after World War II and were an important driver of the rapid economic growth in the 1950s and 1960s. The post-World War II social contract in America resulted in wages that allowed white men working in low or medium-skilled jobs to live a comfortable, middle-class life. The jobs did not require higher education, and racism and sexism had ensured that white men held these well-paying jobs. These workers often lived and worked in small- and mediumsized cities and towns, where their employers were either the largest, or one of the largest employers in that region. However, as factories moved out of the country that post-World War II social contract eroded, leaving behind workers with low human capital who could not find highpaying work in any other emerging sectors. Adding to that, the recent economic growth did not benefit the poorest segments of society (Islam, 2016). Any attempt by these workers to maintain their lifestyle by substituting cheaper imports for more expensive American-made goods for further accelerated the decline in American manufacturing, resulting in more job losses in other regions within the US. Furthermore, labor markets impacted by loss of jobs to changes in trade are very slow to adjust, especially for low wage (and probably lower skilled) workers (Autor, Dorn, & Hanson 2016), which further exacerbated the economic conditions of those regions and workers.

While the economic effects of these sectoral shifts were quickly documented in the media and in academic circles, the effects on the health and well-being of those who had lost their jobs were not studied until much later. First in 2015 and then over the next few years, Case and Deaton (2015, 2017, 2020) investigated the reasons behind the drop in the life expectancy of middleaged white men without a college degree in the US. They found that factors like alcoholism, drug use and overdoses, and suicide explained the reduction in life expectancy among this population sub-group. Further research discovered that these men had become socially isolated and were in despair, and so, the decrease in life expectancy was labelled as "Deaths of Despair."

Because individual-level data on despair is difficult to measure, most of the research focused on explaining the spatial variation of "deaths of despair." Similarly, using county-level data, we applied our urbanists and regionalists lenses to the problem while reflecting on the places where we have lived, worked, or researched. This reflection led us to think that the "deaths of despair" are the tip of an iceberg, with *despair* affecting whole communities and not just middle-aged white men without any college. Our attempt to measure the size of this iceberg of despair in a community led to the creation of a county-level index of despair. This index statistically combines measured levels of various despairing actions. For example, mental distress is often a sign of personal despair, so a county with a higher proportion of population reporting mental distress can be said to be suffering from a greater overall level of despair. We fully describe our methodology of creating the index later in the paper.

Recently, many Americans have found themselves under government- or self-imposed lockdown to slow the spread of COVID 19, giving many of us an idea of what it is like to be socially

isolated. People could not meet and interact in community-level third places (Oldenburg and Brissett 1982) like coffee shops, bars, restaurants, and bowling alleys. Another limitation was the closing of social organizations which led to the rise of remote meetings of civic groups. The joys people felt when these third places of informal interaction began to reopen shows us the importance of third places in reducing our social isolation. Extrapolating from this observation gave us the idea - 'can promoting more informal interaction and creating more third places where informal social contacts can be made help reduce despair?' Our paper goes on to answer this question.

We did not find any research investigating the relationship between community economic indicators and the 'deaths of despair.' Neither did we find research studying how third places (that promotes ties in a community) affects 'deaths of despair' in a community. Thus, our study makes a valuable contribution linking the social interactions of third places with the level of despair of a county.

We use county-level data from the years 2012 and 2017 to construct a county-level index for community despair in the United States. Using this index as a dependent variable, we run regressions to find how county-level third places affect despair. We use variables like the per capita levels of social organizations, small shops, restaurants, and church attendance respectively as proxies to measure the level of third places in a county. We also add different county-level economic and social variables as controls. We find that counties with more third places, specifically social organizations, have a significantly lower level of despair, especially in smaller counties. This shows that increased community-level interactions through these third-places results in less despair, a finding which should not surprise readers of Robert Putnam's work (2000).

2. Literature Review

Academic research studying despair in communities goes back at least to Durkheim (1897). The topic has received more attention recently, especially since Case and Deaton connected economic disruption to a decrease in the life expectancy of middle age white men without a college degree. While Tucker-Seeley et al (2009) had shown that financial hardship leads to higher mortality, Case and Deaton renewed the focus on communities facing hardship. In the twenty-first century, others had found that communities experiencing economic hardship saw a decline in the mental health of residents (Heflin and Iceland 2009), increased drug use (Dasgupta, Beletsky, and Ciccarone 2018), increased crime (Phillips and Land 2012), and higher high school drop-out rates (Kearney and Levine 2016). In the opposite direction, Graziano et al (2019) found that regions with greater economic resilience had populations that were more satisfied with life.

Third places were first identified by Oldenburg and Brissett (1982) as those places which were neither the home and family (first place) nor place of work (second place), but places of regular, informal social interaction. In their 1982 article, they argued that the widely discussed social malaise in America at that time was partially a result of isolation from wider society. This isolation was mainly due to the geographic separation of families and the greater commuting time spent alone in the car (Oldenburg and Brissett, 1982). They proposed that the rise in

counselling as people tried to overcome the malaise could be reduced at much lower cost if people would spend more time at bars, coffee shops, and other third places where "...people gather *primarily* to enjoy each other's company" (1982, p. 269). The core of their argument is that spending time in third places increases the feeling of belonging in a community. Oldenburg went on to make this argument to a wider audience in his 1989 book.

The recent literature on third places is largely from disciplines other than economics. Recent studies of third places have appeared in social work (Littman 2021a, 2021b) and in retail and service management (See Rosenbaum 2006; Rosenbaum *et al*, 2007) journals. Littman (2021a) finds that certain groups constrained from traditional third place contacts (the elderly, incarcerated women, and the homeless) find ways to create spaces that function like traditional third places. Similarly, Rosenbaum (2006) finds that elderly who are regular patrons at a suburban diner "...can satisfy not only their consumption needs but also their companionship and emotional support needs" at the diner (p. 85). In another study, Rosenbaum *et al* (2007) also finds that among those same diner patrons, those who have experienced a greater recent loss of social support obtain greater social support from eating at the diner than those who have experienced a lesser loss of social support. Further research has also pointed out that in many places religious establishment like churches may be places with important third place attributes (Hickman 2013 and Buz *et al* 2014).

3. The Model and Data

We use the following model to study how third places affect despair in US counties:

$$Despair_{it} = a_i + bX_{it} + cZ_{it} + e_{it}$$
(1)

where $Despair_{it}$ is our index of despair for county i in time t, X_{it} is a vector of county-level control variables that other researchers have used to explain despair or deaths of despair, and Z_{it} is a vector of variables measuring third places of county i in time t. e_{it} is the residual, and a_i is the county-specific fixed effect.

We collect county-level data from the 48 contiguous US states. The collected data are for the years 2012 and 2017. 2017 is comfortably after Case and Deaton first noticed the rise in Deaths of Despair and both years are comfortably before the changes in American behavior resulting from the COVID pandemic. Some of the variables used to create this index of despair come from the County Health Rankings database. Other variables come from the US Centers for Disease Control, County Business Patterns and from the website of the Census Bureau. Table I shows the summary statistics of the variables used in the analysis.

Table I: Summary Statistics

Table 1. Summary Statistics			
	Obs.	Mean	Std. Dev.
Despair Index (Dependent Variable)	5,406	0.00	1.00
Premature Death Rate Pct.*	5,406	3.19	2.29
High School Graduation Rate+	5,406	83.48	8.61
Violent Crime Rate per 100,000*	5,406	271.50	213.09
Frequent Mental Distress Population Pct.*	5,406	7.99	4.33
Drug Overdose Death Rate per 100,000	5,406	17.96	8.40
Number of Associations per 10,000*+	5,406	8.41	7.62
Restaurants per 1000 ⁺	5,406	1.78	0.84
Small Retailers per 1000 ⁺	5,406	1.68	1.69
Rate of Church Adherence per 10,000			
(2010)	2,943	50.81	17.11
Church Congregation per 10,000 (2010)	2,943	9.62	12.49
Pop. Pct less than 18 ⁺	5,406	22.93	3.27
Pop. Pct greater than 65 ⁺	5,406	16.67	4.33
Unemployment Rate+	5,406	7.23	3.24
80/20 Income Ratio ⁺	5,406	8.25	4.65
Rural Pop. Pct. ⁺	5,406	55.78	30.27
Pct. Working in Engineering ⁺	5,406	3.29	2.08
Pct. Working in Arts ⁺	5,406	1.15	0.75
Pct. Working in Transportation ⁺	5,406	4.43	1.46
Self-Employed Pct.+	5,406	11.84	5.64
Total Migration Pct. ⁺	5,406	6.66	2.85

Variables with asterisk (*) were obtained from the website of County Health Rankings. Variables with plus (+) were obtained from the website of the Census Bureau/County Business Patterns. Drug overdose death rate was collected from the website of CDC. Number of associations in 2012 was calculated using 2012 County Business Patterns, and the 2017 value was obtained from County Health Rankings website.

4. Constructing the Dependent Variable – Despair

We follow the method outlined in Rizzi et al (2018) to create a suitable measure of county-level despair. Rizzi et al (2018) combined different socio-economic variables into one measure using principal component analysis to create a measure of regional well-being across the European Union. We use a similar technique to create our index, where we just include negative aspects that could potentially cause a rise in despair in a region. The variables we chose are: the premature death rate, high school graduation rate, violent crime rate, proportion of the population experiencing frequent mental distress, and drug overdose death rate. These variables are all outcomes; they all are the result of despair more than causes of despair. The definitions of the variables are listed in Table II below:

Table II: Definition of the Variables used to Construct the Dependent Variable

Variable Name	Definition	Source
Premature Death Rate	The proportion of the population dying before the age of 75	County Health Rankings
High School Graduation Rate	The percentage of 18-24 year old who have at least a high school degree	US Census Bureau American Fact Finder
Violent Crime Rate	The number of reported violent crime per 100,000 population	County Health Rankings
Proportion of the population experiencing frequent mental distress	Proportion of the population stating they experienced 14+ days of poor mental health in a given month	County Health Rankings
Drug overdose death rate	Drug poisoning death rates per 100,000 population	US Centers for Disease Control (CDC)

While they are not exhaustive, all these variables are despairing actions, and are measuring the level of despair in the county. Previous research has shown how each of the variables listed in Table I can be affected by the economic conditions of a region. For example, economic hardships can affect the mental well-being of the residents (Heflin and Iceland 2009), increase crime rate (Phillips and Land 2012), increase the mortality rate (Tucker-Seeley et al 2009), and increase drug use (Dasgupta, Beletsky, and Ciccarone 2018). A lower high school graduation rate can be a result of more despair as it can lessen the level of aspirations of teenagers, making them drop out of school (Kearney and Levine 2017). We haven't included alcohol consumption since it has its own historical geographical distribution, being higher in the north (where despair is generally lower) and lower in the south (where despair tends to be higher). Factors other than economic conditions, such as weather, could influence alcohol consumption. Suicide rates were not included because suicides are largely captured in the premature death rate, which we already used to construct our index.

We use principal component analysis to combine the five variables listed in Table II to create a single measure of despair in a county. As a first check to evaluate the validity of the despair measure, we run a correlation test between the five variables and the despair measure. Table III shows the Pearson correlation matrix.

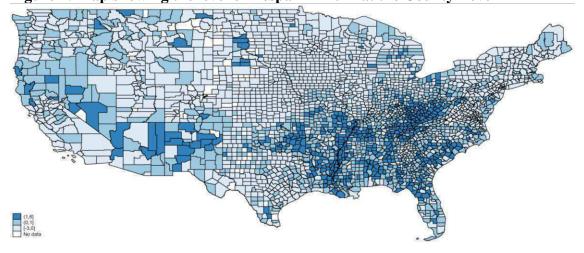
The index *Despair* is positively correlated with premature death rate, violent crime rate, proportion with high mental distress, drug overdose mortality rate, and negatively correlated with the high school graduation rate. Thus, a higher value of the despair variable shows that the lives of people in that area are getting worse.

Table III: Correlation Matrix of Despair Variable, and the Variables Used to Construct it

	Premature	HS Grad	Violent Crime	Proportion with Mental	Drug Overdose Mortality	
	Death Rate	Rate	Rate	Distress	Rate	Despair
Premature Death Rate	1					
HS Grad Rate	-0.2774	1				
Violent Crime Rate	0.1559	-0.0376	1			
Prop w/Mental Distress Drug Overdose	0.6309	-0.1924	0.3333	1		
Mortality Rate	0.3422	0.0357	0.0899	0.3219	1	
Despair	0.8379	-0.3671	0.4464	0.8595	0.5487	1

We also map the *Despair* variable on a choropleth map to see how it is spatially distributed. Figure 1 shows the map of the US.

Figure 1: Map showing the level of Despair in 2017 at the County Level¹



The darker the color, the more despaired the county. The map shows that most of the despaired counties are in the south-eastern part of the US and the southern part of the Midwest region. Specifically, the despaired regions are located in the Appalachian Region, the Mississippi Delta, the desert regions of the west, coastal Carolinas, and the Deep South. Though they use a different geographic measure of community, Case and Deaton's (2017) maps of Deaths of Despair (their Figure 6), look a lot like our Figure 1 above². Furthermore, we find that the 2012 despair data is highly correlated with the 2017 despair data (correlation of 0.83). This fact along with our figure, shows that despair is made worse in part due to geographic immobility of the workers. Research has shown that geographic immobility is mainly due to the high housing cost in growing areas,

¹ In some counties, the violent crime rate was missing. In such cases, we used the state average of violent crime rate as a proxy for the missing value. We, however, did not include those proxy values in the regressions.

² We also created a similar map using 2012 data. Since it looked very similar to the 2017 map, we did not include it in the paper

the mismatch of the skills that are demanded by employers and those that the low-skilled workers have, and the housing market crisis (Graham and Pinto, 2019).

Thus, our constructed index of *Despair* variable provides us with a good proxy of the level of despair in a county, where a lower value indicates that the county has low levels of crime, and physical and mental ills, while a higher value indicates the county is prone to higher levels of crime, and physical and mental ills.

5. Measuring Third Places.

Following Oldenburg and Brissett (1982) and Oldenburg (1999) we found data in the 2012 and 2017 *County Business Patterns* for the number of Eating and Drinking Places (NAICS 722). We then converted the numbers to be per 1,000 population for each county. This is our variable that proxies the number of eating establishments (restaurants) in a county.

Following the findings of Rosenbaum *et al* (2020) for a sample of Colombian shoppers, we also believe that there may be social ties between the customers and the employers/employees of small businesses in an area, especially in small towns of the US. We collected the number of retailers (NAICS 44-45) with less than 20 employees in each county from the 2012 and 2017 *County Business Patterns* and scaled the data to express it as per 1,000 residents.

The 2017 *County Health Rankings* provided us with the variable *Association Rate*. This variable is the number per 10,000 population of the following social clubs: (i) Civic and Social Organizations, (ii) Bowling Centers, (iii) Golf Courses and Country Clubs, (iv) Fitness and Recreation Sports Centers, (v) Sports and Tennis Clubs, (vi) Religious Organizations, (vii) Political Organizations, (viii) Business Associations, Professional Organizations, and Labor Organizations. While the 2017 data is from County Health Rankings website, the 2012 data was unavailable. So, we used the same methodology outlined in County Health Rankings and constructed the 2012 Association Rate variable using the 2012 *County Business Patterns* dataset.

Churches also may be places where people establish ties that link them to a community. Therefore, we collected both the number of congregations (per 10,000 residents) and the total church attendance (per 10,000) from the website of the Association of Religion Data Archives (ARDA). The most recent data available is from 2010, so it cannot be used in fixed-effects regressions. We thus use the 2010 data as proxies for 2012 and 2017.

6. Control Variables

We included a set of economic variables as controls in our regressions. Specifically, we include unemployment rate and income inequality as controls, as they were found to result in greater distress by Tucker-Seely *et al* (2009) and Heflin and Iceland (2009). Richard Florida (2002) has long argued that a more creative workforce should lead to a more vibrant local economy. We try to capture this effect by including the percentage of the county workforce employed in Engineering, Science, and Computer occupations and the percentage working in Arts and Design occupations. Similarly, more entrepreneurs should make a community more resilient

economically (Audretsch, Belitski, and Desai, 2015). We thus include the proportion of the workforce working in "no employee" firms as a proxy for entrepreneurship. Other variables that we included as controls are percentage of population over 65, percentage of population below 18, percent of population living in rural areas, and the proportion of the population who migrated into the county. All these data were downloaded from the website of the Census Bureau.

7. Results

We run a number of regressions to analyze the effect of third places on our despair index. The main results are presented in Table IV, which illustrates the cross-section regressions results from years 2012 and 2017 respectively, and the results from the fixed effects regression for the two years together³. Because the variables for church adherence and number of congregations were available for only one year (year 2010), they were not included in the fixed effects regression. When the "third place" variables are entered one at a time, the coefficients are negative and statistically significant for four of the five variables in both 2012 and 2017 (namely, association rate, restaurants per 1000, small retailers per 100, and church adherence per 100). Looking at column 1, where all the third-place variables are entered together, we see that small retailers have the wrong sign, probably because of multicollinearity (the correlation between restaurants and small retailers in 2017 is .667 and between small retailers and associations is .451). The fixed-effects regression results in column 1 show that only the associations variable remains statistically significant and with the correct sign.

Table V shows the results for the population-weighted regressions for 2012 and 2017. We didn't perform a population-weighted fixed effects regression because the population of counties changed between 2012 and 2017. The 2012 results in Table V are similar to those in Table IV, with the same four of five third place variables having statistically significant negative signs when they are entered separately. Also, associations per 10,000, number of restaurants per 1,000, and religious adherence having statistically significant negative signs when all of the third place variables are entered together.

The results for 2017 are much less interesting and somewhat puzzling. Since counties range in population from less than 1,000 into the millions, the larger counties carry more weight in the regression results of Table V, and the effects of third places on the despair index are greatly reduced. Remembering that despair is a problem in less prosperous communities we removed the most prosperous counties from our sample, which in turn also eliminated the largest counties.

³ The number of observations in 2012 is lower than that of 2017 because not all variables used to create the Despair Index were available for all the counties

Table IV: Main Regression Results

	(1)	(2)	(3)	(4)	(5)	(6)
Fixed Effects Model						
Association Rate per 10,000	-0.005**	-0.009**				
	(0.002)	(0.002)				
Restaurants per 1000	-0.029		-0.011			
	(0.018)		(0.016)			
Retail per 100	0.030**			0.033**		
•	(0.011)			(0.009)		
Observations	5,406	5,489	5,407	5,406		
R-squared	0.098	0.094	0.089	0.094		
Number of FIPS	2,993	3,064	2,993	2,993		
Regression using 2012 Data only						
Association Rate per 10,000	-0.069**	-0.047**				
	(0.014)	(0.012)				
Restaurants per 1000	-0.102**		-0.129**			
	(0.029)		(0.021)			
Retail per 100	0.004			-0.050**		
	(0.018)			(0.013)		
otal Rate of Adherence per 100	-0.008**				-0.004**	
	(0.001)				(0.001)	
Congregation Rate per 100	0.021**					0.010**
	(0.003)					(0.002)
Observations	2,463	2,463	2,463	2,463	2,463	2,463
R-squared	0.464	0.437	0.443	0.436	0.437	0.437
Cegression using 2017 Data only						
Association Rate per 10,000	-0.032**	-0.025**				
	(0.003)	(0.003)				
Restaurants per 1000	-0.175**		-0.186**			
	(0.023)		(0.019)			
Retail per 100	0.518**			-0.624**		
	(0.155)			(0.141)		
Cotal Rate of Adherence per 100	-0.005**				-0.005** (0.001)	
	(0.001)				(/	
Congregation Rate per 100	1.959**					0.490**
1	(0.190)					(0.159)
Observations	2,943	3,026	2,944	2,943	3,026	3,026
R-squared	0.580	0.548	0.548	0.536	0.536	0.532

Standard errors in parenthesis. * indicate significance in at 10 percent, ** at 5 percent. The dependent variable is the Despair Index. The regressions controlled for the following county-level variables: percent population less than 18, percent of population greater than 65, unemployment rate, 80/20 income ratio, rural population percentage, percent of civilian population working in engineering, percent of civilian population working in arts, percent of civilian population self-employed, and percent of total migration migrated.

Table V: Population-Weighted Regression Results

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Using 2012 Data						
Association Rate per 10,000	-0.139**	-0.067**				
	(0.022)	(0.019)				
Restaurants per 1000	-0.185**		-0.163**			
-	(0.038)		(0.026)			
Retail per 100	0.063**			-0.024		
-	(0.029)			(0.023)		
Total Rate of Adherence per						
100	-0.011**				-0.004**	
	(0.002)				(0.002)	
Congregation Rate per 100	0.042**					0.026**
	(0.004)					(0.004)
Observations	2,463	2,463	2,463	2,463	2,463	2,463
R-squared	0.576	0.527	0.541	0.526	0.528	0.541
Using 2017 Data						
Association Rate per 10,000	-0.000	0.027**				
_	(0.009)	(0.009)				
Restaurants per 1000	-0.212**		-0.108**			
-	(0.067)		(0.045)			
Retail per 100	1.262**			0.546		
•	(0.516)			(0.337)		
Total Rate of Adherence per	,			, ,		
100	-0.012**				-0.002	
	(0.003)				(0.002)	
Congregation Rate per 100	5.081**					3.942**
						(0.441)
	(0.514)					
Observations	2,943	3,026	2,944	2,943	3,026	3,026
R-squared	0.559	0.514	0.514	0.513	0.507	0.535

Standard errors in parenthesis. * indicate significance in at 10 percent, ** at 5 percent. The dependent variable is the Despair Index. The regressions controlled for the following county-level variables: percent population less than 18, percent of population greater than 65, unemployment rate, 80/20 income ratio, rural population percentage, percent of civilian population working in engineering, percent of civilian population working in arts, percent of civilian population working in transportation, percent of civilian population self-employed, and percent of total migration migrated.

Both the unweighted and population weighted results for all-but-the-largest counties are presented in Table VI and VII respectively. The control variable results are not shown but are available from the authors. In the cross-section models, the same four of five third place variables have statistically significant negative coefficients when entered separately, and three of the five have statistically significant negative coefficients when entered together, with small retailers changing sign. In both Tables VI and VII, the coefficient for Associations per 10,000 remain statistically significant and negative in all specifications of the model.

Table VI: Regression Results of Counties with Population in the Bottom 75th Percentile

	(1)	(2)	(3)	(4)	(5)	(6)
Fixed Effects Model						
Association Rate per 10,000	-0.008**	-0.014**				
	(0.003)	(0.003)				
Restaurants per 1000	-0.051*		-0.035			
-	(0.027)		(0.026)			
Retail per 100	0.038**			0.047**		
•	(0.016)			(0.013)		
Observations	5,406	5,489	5,407	5,406		
R-squared	0.098	0.094	0.089	0.094		
Number of FIPS	2,993	3,064	2,993	2,993		
Regression using 2012 Data only						
Association Rate per 10,000	-0.061**	-0.047**				
	(0.017)	(0.016)				
Restaurants per 1000	-0.035		-0.086**			
	(0.037)		(0.028)			
Retail per 100	-0.028			-0.053**		
	(0.025)			(0.019)		
Total Rate of Adherence per 100	0.017**				0.007**	
	(0.003)				(0.003)	
Congregation Rate per 100	-0.009**					-0.006**
	(0.002)					(0.002)
Observations	1,201	1,201	1,201	1,201	1,201	1,201
R-squared	0.412	0.387	0.387	0.386	0.390	0.386
Regression using 2017 Data only						
Association Rate per 10,000	-0.030**	-0.028**				
	(0.003)	(0.003)				
Restaurants per 1000	-0.161**		-0.183**			
	(0.025)		(0.021)			
Retail per 100	0.285*			-0.697**		
	(0.167)			(0.170)		
Total Rate of Adherence per 100	1.701**				0.300	
	(0.199)				(0.184)	
Congregation Rate per 100	-0.006**					-0.006**
	(0.001)					(0.001)
Observations	1,643	1,716	1,644	1,643	1,716	1,716
R-squared	0.641	0.599	0.602	0.589	0.580	0.572

Standard errors in parenthesis. * indicate significance in at 10 percent, ** at 5 percent. The dependent variable is the Despair Index. The regressions controlled for the following county-level variables: percent population less than 18, percent of population greater than 65, unemployment rate, 80/20 income ratio, rural population percentage, percent of civilian population working in engineering, percent of civilian population working in arts, percent of civilian population working in transportation, percent of civilian population self-employed, and percent of total migration migrated.

Table VII: Population-Weighted Regression Results on Counties with Population in the Bottom 75th Percentile

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Using 2012 Data						
Association Rate per 10,000	-0.080**	-0.067**				
	(0.019)	(0.018)				
Restaurants per 1000	-0.060		-0.091**			
	(0.045)		(0.030)			
Retail per 100	0.003			-0.036*		
	(0.029)			(0.021)		
Total Rate of Adherence per						
100	-0.010**				-0.006**	
	(0.002)				(0.002)	
Congregation Rate per 100	0.017**					0.006*
	(0.004)					(0.003)
Observations	2,463	2,463	2,463	2,463	2,463	2,463
R-squared	0.576	0.527	0.541	0.526	0.528	0.541
	_					
Using 2017 Data						
Association Rate per 10,000	-0.043**	-0.037**				
_	(0.003)	(0.003)				
Restaurants per 1000	-0.164**		-0.201**			
	(0.029)		(0.025)			
Retail per 100	0.029)			-0.603**		
Retail per 100	0.510			-0.003		
	(0.183)			(0.197)		
Total Rate of Adherence per	, ,			, ,		
100	-0.006**				-0.005**	
	(0.001)				(0.001)	
Congregation Rate per 100	2.332**					0.878*
	(0.224)					(0.211)
Observations	1,643	1,716	1,644	1,643	1,716	1,716
R-squared	0.664	0.621	0.613	0.599	0.596	0.595

Standard errors in parenthesis. * indicate significance in at 10 percent, ** at 5 percent. The dependent variable is the Despair Index. The regressions controlled for the following county-level variables: percent population less than 18, percent of population greater than 65, unemployment rate, 80/20 income ratio, rural population percentage, percent of civilian population working in engineering, percent of civilian population working in arts, percent of civilian population working in transportation, percent of civilian population self-employed, and percent of total migration migrated.

Overall, we find evidence that, except possibly in the largest counties, third places like social associations can help reduce despair. Other third places like restaurants and small retailers do not consistently impact the level of despair. It does make intuitive sense because in a social association, one must actively participate in the activities, while in other third places, one can choose their level of participation (for example, one can choose to be friendly to the barista of the local coffee shop or have a minimal interaction with the person). Thus, more social organizations can provide an important avenue for individuals to interact in the community, giving people a sense of belonging, which could help in reducing despair.

8. Summary and Policy Suggestions

Case and Deaton found that in the 21st Century, middle-aged white men without any college degree had fallen into a cycle of despair following the loss of many millions of low- and moderate-skill factory jobs. They noticed that life expectancy of this group had fallen and upon further analysis found that suicides, alcoholism, and drug overdoses had resulted in a growth of what they named "deaths of despair." Following this line of reasoning, we surmised that despair may be widespread across a community, and not just a specific population sub-group. Borrowing the idea of the importance of "third places" in sustaining social ties in a community, we found that smaller counties with more third places per capita had less despair after controlling for a wide range of economic and demographic variables.

Case and Deaton (2020) have suggested a wide-ranging national restructuring of the American economy to combat the rise in deaths of despair. Our results show that local governments do not have to wait for an unlikely national restructuring but may be able to combat despair in their communities by encouraging the creation of third places. A local government could use small business development grants to support more community interaction, like open mic night, the establishment of community centers, or a farmer's market during the weekends. The local government could also allow a new club to meet in a municipal building rent free. Any of these actions would create new third places where socially isolated people could socialize and halt their downward spiral toward despair. To borrow a phrase from the subtitle of Oldenburg's book, these places can help despairing individuals "get through the day" and improve the overall quality of life in a community.

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