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Research Article

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The purpose of this study was to explore the motivations of teachers in a Midwestern state that has a mix of rural and non-rural geographic regions. Namely, this study set out to identify differences between educators working in rural areas and those working in non-rural (urban or suburban) regions by examining their motivations, perceptions, and reasons for teaching through administration of the Factors Influencing Teaching Choice (FIT-Choice) survey to a group of 616 Midwestern educators. Multiple group confirmatory factor analysis confirms that the collected data do fit the model as outlined by Watt and Richardson, and significant differences were found between 6 of 18 measured subfactors, including: fallback career, job transferability, time for family, salary, satisfaction teaching, and social contribution. As policy interacts with place, these findings suggest that a one-size-fits-all policy model may warrant reconsideration. Rural and non-rural teachers are not identical groups, and perhaps the differences run deeper than teachers simply needing more exposure to a rural setting.

Across the United States (US), the need for teachers outpaces the supply, creating challenges for school districts annually (Cross, 2017). Recruiting and retaining qualified teachers is a high priority for many states (Sutcher et al., 2019) and is most difficult in states that include large rural areas (Trinidad et al., 2014). What attracts and keeps rural teachers in the field has been a key question for researchers nationally and internationally (Beesley et al., 2010; Holmes et al., 2019; Leech et al., 2022; See et al., 2020), underscoring the urgency of this issue.

Monk (2007) argued that solutions to teacher shortages, especially in rural areas of the US, should be informed by the unique characteristics of the area or state. The Colorado Department of Education (Cole, 2017) developed a strategic plan to address its teacher shortage, including initiatives meant to attract and retain talented teachers in rural districts. Recently, this plan has led to legislation that ties student loan forgiveness to a requirement to teach in rural areas for a specified amount of time (Supporting Educator Workforce in Colorado, 2021). While efforts to recruit and retain teachers have shown some promise (See et al., 2020), teachers' motivations for teaching are another key aspect to understanding the complex decision to enter and remain in the teaching profession in rural areas.

Literature Review

While many U.S. school districts experience challenges recruiting and retaining teachers (Sutcher et al., 2019), rural districts' challenges are compounded by distinct factors (Monk, 2007; Tran et al., 2020). In this literature review, we examine extant research on bringing and keeping high-quality teachers into rural areas. We highlight studies that explore the unique challenges these areas face and promising approaches to address these challenges. We then present a review of literature pertaining to motivations for teachers to choose the teaching profession (Watt & Richardson, 2007).

Recruiting and Retaining Rural Teachers

Rural districts in many countries, including the US, have documented difficulties in attracting and retaining educators (Trinidad et al., 2014), and these difficulties span reasons both personal and professional. Personally, rural educators must find the unique aspects of rural living to be appealing. Kline and Walker-Gibbs (2015) noted that educators may be less likely to teach in rural settings as it requires a move away from family and friends who live in urban areas. Further, fewer work opportunities for immediate family and significant others make committing to a move even more difficult (Kelly & Fogarty, 2015; Lyons, 2009). In some states, a lack of

access to housing and comparative geographic isolation add barriers to the recruitment process (Monk, 2007). Professionally, rural educators must meet expectations that vary greatly from those in urban settings. Rural teachers often have smaller class sizes and enjoy greater autonomy in the classroom, but these benefits are often coupled with requirements to teach multiple subjects or multiple grades in a single classroom, as well as an adjustment to more community-centered school systems and policymaking (Barley, 2009). These requirements are best addressed through specialized preparation, but not all preparation programs offer practicum or student teaching in rural areas, experience in teaching multiple grade levels, or specialized trainings to help teachers understand the role of the community in rural schools.

The other side of the educator shortage problem is retention. Teacher turnover is associated with lower student achievement (Darling-Hammond et al., 2017), which implies that greater student learning is supported by keeping experienced teachers. Efforts to retain rural teachers are more fruitful when new hires are able to anticipate the affordances and limitations of working in a rural district (Oyen & Schweinle, 2020; See et al., 2020; Tran et al., 2020). This finding supports Barley's (2009) hypothesis that educator preparation programs can and should provide preparation responsive to the particularities of education in rural settings. Additionally, helping teachers feel respected and appreciated for the work they do, as well as creating supportive, positive school cultures, also seems important for retaining teachers (Leech et al., 2022; Frahm & Cianca, 2021; See et al., 2020). Moreover, administrative provision of professional development opportunities and recognition of individual educator accomplishments also seem to bolster educator retention (Haar, 2007).

Motivations for Teaching in Rural Schools

Beyond the practical considerations that factor into an educator's decision to teach in a rural setting, some research has been conducted to identify specific motivations that influence educators to take rural over non-rural teaching positions (Leech et al., 2022; Seelig & McCabe, 2021). Wisconsin rural teachers attributed their reasons for continuing to teach in rural areas to classroom environments that demonstrate (a) a commitment to students and meeting their needs; (b) supportive relationships among colleagues and administrators; (c) the reflexive relationship between local community and

school; and (d) personal, professional, and familial connections within the local community (Seelig & McCabe, 2021). Similarly, when asked why they chose to work in rural schools, Colorado rural teachers shared they desired a rural lifestyle; valued personal and familial connections to the area; and wanted to work in schools that had a positive, supportive environment (Leech et al., 2022). In a third study, Australian rural and remote teachers selected "ability to gain a permanent position," "attraction of a rural ambiance," "stronger sense of collegiality," and "gaining experience/exposure in rural education" most frequently from a questionnaire list of possible reasons to teach in a rural setting (Handal et al., 2018, p. 14). Together, these studies confirm the motivations of rural teachers, suggested by the broader literature: Rural teachers desire to work in schools that embody small town sensibilities, provide opportunities for professional success, and are supportive and collegial. Nevertheless, studies that attempt direct comparisons between the motivations of rural and non-rural educators remain comparatively uncommon but may provide the most effective insight into what distinguishes a rural educator from a non-rural educator.

Measuring Teachers' Motivations: FIT-Choice

Direct comparison of rural and non-rural educator motivations requires a comprehensive instrument, built with an underlying theoretical framework that suits both rural and non-rural educators. The Factors Influencing Teaching Choice (FIT-Choice) scale, developed by Watt and Richardson (2007), provides such an instrument. Based on expectancy-value motivation theory (Eccles et al., 1983), the FIT-Choice scale assesses educators across 18 subfactors and six factors: socialization influences, task demand, task return, self-perceptions, intrinsic value (personal and social utility), and fallback career.

Since the initial study validating the measure (Watt & Richardson, 2007), other researchers have validated the scale for preservice teachers in other countries: the Netherlands (Fokkens-Bruinsma & Canrinus, 2014), China and the US (Lin et al., 2012), and Switzerland (Berger & D'Ascoli, 2012). More recently, Leech and Haug (2015) examined the validity of the FIT-Choice scale with in-service teachers in the US, and they found some differences regarding how the data fit the factors when compared to the preservice teachers from Lin et al. (2012).

The FIT-Choice scale, validated in a variety of settings, both rural and non-rural, provides a framework for exploring and comparing educator motivation that is comprehensive, robust, and more granular than quantitative alternatives. Understanding the motivations of people who choose to teach in rural areas and how those motivations compare to the more general teaching population could provide insight into effective strategies for recruiting and retaining rural teachers. We intend to contribute to the existing literature on rural teachers and literature on teachers' motivations for teaching by addressing two research questions: First, can the data collected from rural and non-rural educators be organized into the model as proposed by Watt and Richardson (2007)? Second, if they are similar, are rural and non-rural educators motivated in the same ways?

Method

This quantitative correlational study employed a survey design to collect data from educators representing both rural and non-rural areas. The survey utilized items from the FIT-Choice scale (Watt & Richardson, 2007), including statements

related to respondents' motivations for teaching, perceptions of teaching, and reasons for becoming a teacher. Additionally, the survey included open-ended questions regarding participants' experience of teaching; these data are reported elsewhere (Leech et al., 2022). Demographic information was also collected, including the respondent's school district.

Data Collection and Participants

The FIT-Choice survey was administered via email to K–12 educators in a Midwestern state representing all subject areas, from which 616 responses were received. Respondents provided their district of employment, and researchers identified these districts as rural or non-rural based on the state department of education's rural designation list. State rural designation is determined based on student enrollment of 6,500 students or fewer and the proximity of the district from urban clusters, urbanized areas, and census-defined rural territories as used by the National Center for Education Statistics. Of the 616 respondents, 339 were identified as teaching in non-rural areas and 151 in rural areas. Table 1 represents the demographic

Table 1
Demographics

	Sample		Non-Rural		Rural	
	<i>N</i>	%	<i>n</i>	%	<i>n</i>	%
Total	490	-	339	-	151	-
<i>Gender</i>						
Female	396	80.82	273	80.53	123	81.46
Male	91	18.57	64	18.88	27	17.88
Not reported	3	.61	2	.59	1	.66
<i>Race/Ethnicity</i>						
White	426	86.94	294	86.73	132	87.42
Hispanic/Latino	28	5.71	16	4.72	12	7.95
Two or more races	13	2.65	11	3.24	2	1.32
Black/African American	9	1.84	6	1.77	3	1.99
Asian/Pacific Islander	7	1.43	6	1.77	1	.66
American Indian/AK Native	3	.61	2	.59	1	.66
Not reported	4	.82	4	1.18	-	-
<i>Age</i>						
21–34 years	158	32.24	110	32.45	48	31.79
35–44 years	142	28.98	102	30.09	40	26.49
45–54 years	118	24.08	80	23.60	38	25.17
55–64 years	66	13.47	42	12.39	24	15.89
65+ years	5	1.02	4	1.18	-	-
Not reported	1	.20	1	.29	-	-

Table 2

Item Numbers, Subfactors, and Items by Factor for All FIT-Choice Questions

Item number	Subfactor	Original item
<i>Factor: Motivations for teaching</i>		
B5	Ability	I have the qualities of a good teacher.
B19		I have good teaching skills.
B43		Teaching is a career suited to my abilities.
B1	Intrinsic career value	I am interested in teaching.
B7		I've always wanted to be a teacher.
B12		I like teaching.
B13	Work with children and adolescents	I want a job that involves working with children/adolescents.
B37		I like working with children/adolescents.
B26		I want to work in a child/adolescent-centered environment.
B36	Enhance social equity	Teaching will allow me to raise the ambitions of underprivileged youth.
B49		Teaching will allow me to benefit the socially disadvantaged.
B54		Teaching will allow me to work against social disadvantage.
B22	Job transferability	A teaching qualification is recognized everywhere.
B8		Teaching will be a useful job for me to have when travelling.
B45		A teaching job will allow me to choose where I wish to live.
B31	Social contribution	Teaching enables me to 'give back' to society.
B20		Teachers make a worthwhile social contribution.
B6		Teaching allows me to provide a service to society.
B2	Time for family	Part-time teaching could allow more family time.
B4		As a teacher I will have lengthy holidays.
B15		Teaching hours will fit with the responsibilities of having a family.
B18		As a teacher I will have a short working day.
B29		School holidays will fit in with family commitments.
B9	Shape future of children/adolescents	Teaching will allow me to shape child/adolescent values.
B23		Teaching will allow me to influence the next generation.
B53		Teaching will allow me to have an impact on children/adolescents.
B11	Fallback career	I was unsure of what career I wanted.
B35		I was not accepted into my first-choice career.
B48		I chose teaching as a last-resort career.
B14	Job security	Teaching will offer a steady career path.
B27		Teaching will provide a reliable income.
B38		Teaching will be a secure job.
B17	Prior teaching and learning experiences	I have had inspirational teachers.
B30		I have had good teachers as role-models.
B39		I have had positive learning experiences.
B3	Social influences	My friends think I should become a teacher.
B24		My family thinks I should become a teacher.
B40		People I've worked with think I should become a teacher.

Item number	Subfactor	Original item
<i>Factor: Perceptions of teaching</i>		
C10	Expertise	Do you think teaching requires high levels of expert knowledge?
C14		Do you think teachers need high levels of technical knowledge?
C15		Do you think teachers need highly specialized knowledge?
C2	Difficulty	Do you think teachers have a heavy workload?
C7		Do you think teaching is emotionally demanding?
C11		Do you think teaching is hard work?
C4	Social status	Do you believe teachers are perceived as professionals?
C5		Do you believe teaching is perceived as a high-status occupation?
C8		Do you believe teaching is a well-respected career?
C9		Do you believe teachers have high morale?
C12		Do you believe teachers feel valued by society?
C13		Do you believe teachers feel their occupation has high social status?
C1	Salary	Do you think teaching is well-paid?
C3		Do you think teachers earn a good salary?
<i>Factor: Reasons to become a teacher</i>		
D2	Social dissuasion	Were you encouraged to pursue careers other than teaching?
D4		Did others tell you teaching was not a good career choice?
D6		Did others influence you to consider careers other than teaching?
D1	Satisfaction with choice	How carefully have you thought about becoming a teacher?
D3		How satisfied are you with your choice of becoming a teacher?
D5		How happy are you with your decision to become a teacher?

breakdown of educators with an identified rural or non-rural status (126 did not self-disclose their district of employment).

Table 2 presents the FIT-Choice survey questions, which consist of 58 Likert scale items, each rated by the respondent on a scale of one through seven (strongly disagree to strongly agree). In addition to administering the FIT-Choice survey, five open-ended questions were administered regarding why the participant chose to teach where they were teaching (rural, suburban, or urban setting), what their ideal location to teach would be, what they would tell a new teacher as a mentor, and whether they were planning on leaving the teaching profession or if they know of others who had left.

Data Analysis

Data were imported from RedCAP using R Software for Statistical Analysis (R Core Team, 2022). The lavaan package was used for conducting multiple group confirmatory factor analysis (MGCFA; Rosseel, 2012) and the semPlot package for model visualization (Epskamp, 2019). To address the first research question (Can the data collected from rural

and non-rural educators be organized into the model as proposed by Watt and Richardson [2007]?), three multiple group confirmatory factor analyses were conducted based on the models theorized by Watt and Richardson (2007). Full-information maximum likelihood estimation was used to handle missing data (Schumacker & Lomax, 2010). The following fit statistics were used to evaluate model fit: a comparative fit index (CFI) and Tucker Lewis Index (TLI) over .90 and a root mean square error of approximation (RMSEA) under .8 (Parry, 2021); further, standardized regression weights greater than or equal to .40 were considered acceptable (Schumacker & Lomax, 2010). Satisfaction of these conditions is used as an indicator of how well the sample data conform to the model proposed by Watt and Richardson and provides evidence of construct validity, without which group comparisons inferred from the model would not be robust. Configural, scalar, and metric invariance were tested to ensure the validity of comparisons between latent variable means (Hirschfeld & Brachel, 2014). Configural invariance was tested by running MGCFA grouped by rural and non-rural. The configural model was considered acceptable based on the same model fit indices listed above (Lee, 2018). If configural

invariance was supported in the data, two chi-square difference tests were conducted: (a) one tested the configural model against a metric model, a grouped model with constrained factor loadings; (b) the other tested the metric model against a scalar model, a grouped model with constrained factor loadings and intercepts (Hirschfeld & Brachel, 2014). With the condition of scalar invariance satisfied, group differences between latent construct means can be considered robust and in alignment with the model as proposed by Watt and Richardson (2007).

To address the second research question (Are rural and non-rural educators motivated in the same ways?), *t*-tests were performed between group mean scores on each subfactor. Levene's test was conducted on each subfactor to determine homogeneity of variance. For subfactors where equal variance could be assumed, two sample *t*-tests were performed; for subfactors with significant Levene's tests, where homogeneity of variance could be assumed, Welch's two-sample *t*-tests were performed (Morgan et al., 2020).

Results

Multiple Group CFA

To understand the first research question (Can the data collected from rural and non-rural educators be organized into the model as proposed by Watt and Richardson [2007]?), multiple CFAs were conducted. The results are presented in three sections: motivation to teach, perceptions of teaching, and reasons for teaching. Finally, differences between rural and non-rural teachers are assessed and presented by subfactor.

Motivation to Teach

When comparing rural and non-rural teachers on motivation to teach, the baseline model demonstrated acceptable fit, CFI = .91, TLI = .89, RMSEA = .055, $\chi^2(599) = 1608.58$, $p < .001$. While the chi-square value was significant, it may be attributed to large sample size (Schumacker & Lomax, 2010). Further, all loadings were above .40, and all paths were statistically significant, which indicates that the data, taken as a whole, fit the model as expected. Thus, the data from both groups fit the model similarly as outlined by Watt and Richardson (2007). Since the data fit the model, we can assume that the model is a good way of understanding the data. This understanding allows us to combine the data for later analyses of group differences.

The configural model (grouped by rural and non-rural with no equality constraints) showed worse fit with CFI = .87, TLI = .85, RMSEA = .065, $\chi^2(1198) = 2346.67$, $p < .001$. While the chi-square was statistically significant and the CFI and TLI were below the .90 threshold, all factor loadings were above .40 and all pathways were statistically significant for both rural and non-rural groups, indicating support for configural invariance. See Table 3 for factor loadings. Two chi-square difference tests were then conducted, one between the configural and metric models, and one between the metric and scalar models. Non-statistically significant chi-square results for each as presented in Table 4 indicate support for both metric and scalar invariance, which indicates group differences between rural and non-rural groups can be assessed at the subfactor level. A diagram of this model is not included due to the number of observed and latent variables.

Perceptions of Teaching

When comparing rural and non-rural teachers on perceptions of teaching, the baseline model demonstrated acceptable fit, CFI = .97, TLI = .96, RMSEA = .05, $\chi^2(71) = 173.16$, $p < .001$. While the chi-square value is statistically significant, it may be attributed to large sample size (Schumacker & Lomax, 2010). Further, all loadings are above .40 and all paths are statistically significant, which indicates that the data, taken as a whole, fit the model as expected. Thus, the data from both groups fit the model similarly as outlined by Watt and Richardson (2007). Since the data fit the model, we can assume that the model is a good way of understanding the data. This understanding allows us to combine the data for later analyses of group differences.

The configural model (grouped by rural and non-rural with no equality constraints) shows good fit with CFI = .97, TLI = .96, RMSEA = .05, $\chi^2(142) = 227.99$, $p < .001$. Additionally, all pathways presented in Table 2 are statistically significant for both rural and non-rural groups and all factor loadings are above .40 except for item C9 (Do you believe teachers have high morale?), indicating adequate support for configural invariance. Two chi-square difference tests were then conducted, one between the configural and metric models, and one between the metric and scalar models. Non-statistically significant chi-square results for each (summarized in Table 3) indicate support for both metric and scalar invariance, which indicates group

Table 3

Standardized Factor Loadings of the Latent Variables for Rural and Non-Rural Groups

Relationship	Non-rural	Rural
<i>Factor: Motivations for teaching</i>		
B43 ← Ability	.671	.619
B5 ← Ability	.827	.826
B19 ← Ability	.864	.784
B1 ← Intrinsic value	.743	.706
B7 ← Intrinsic value	.420	.381
B12 ← Intrinsic value	.636	.651
B11 ← Fallback career	.747	.701
B35 ← Fallback career	.590	.460
B48 ← Fallback career	.697	.812
B14 ← Job security	.712	.758
B27 ← Job security	.719	.667
B38 ← Job security	.862	.872
B2 ← Time for family	.802	.815
B15 ← Time for family	.854	.854
B29 ← Time for family	.763	.855
B4 ← Time for family	.533	.535
B18 ← Time for family	.457	.503
B8 ← Job transferability	.445	.527
B22 ← Job transferability	.747	.674
B45 ← Job transferability	.617	.668
B9 ← Shape future	.723	.774
B23 ← Shape future	.766	.626
B53 ← Shape future	.814	.896
B36 ← Social equity	.855	.815
B49 ← Social equity	.911	.889
B54 ← Social equity	.855	.851
B6 ← Social contribution	.818	.875
B20 ← Social contribution	.831	.879
B31 ← Social contribution	.825	.765
B13 ← Work with children	.868	.896
B26 ← Work with children	.817	.903
B37 ← Work with children	.780	.718
B17 ← Prior teaching	.878	.876
B30 ← Prior teaching	.994	.889
B39 ← Prior teaching	.680	.652
B3 ← Social influences	.708	.634
B24 ← Social influences	.721	.877
B40 ← Social influences	.851	.796
<i>Factor: Perceptions of teaching</i>		
C10 ← Expertise	.738	.680
C14 ← Expertise	.648	.807
C15 ← Expertise	.842	.801
C2 ← Difficulty	.646	.688
C7 ← Difficulty	.624	.660
C11 ← Difficulty	.881	.766
C4 ← Social status	.731	.792
C9 ← Social status	.326	.433
C5 ← Social status	.818	.798

Relationship	Non-rural	Rural
C12 ← Social status	.827	.792
C8 ← Social status	.822	.820
C13 ← Social status	.709	.675
C1 ← Salary	.944	.924
C3 ← Salary	.835	.898
<i>Factor: Reasons to become a teacher</i>		
D1 ← Satisfaction	.425	.358
D3 ← Satisfaction	.928	.935
D5 ← Satisfaction	.959	.991
D2 ← Dissuasion	.664	.595
D4 ← Dissuasion	.601	.461
D6 ← Dissuasion	.917	.936

differences between rural and non-rural groups can be assessed at the subfactor level.

Reasons for Teaching

When comparing rural and non-rural teachers on reasons for teaching, the baseline model demonstrates acceptable fit, CFI = .98, TLI = .96, RMSEA = .08, $\chi^2(9) = 45.85, p < .001$. While the chi-square value is statistically significant, it may be attributed to large sample size (Schumacker & Lomax, 2010). Further, all loadings are above .40 and all paths are statistically significant, except for item D1 (How carefully have you thought about becoming a teacher?), which has a standardized factor loading of .38 and may be a poor predictor of this factor. Nevertheless, these data generally demonstrate good model fit. Thus, the data from both groups fit the model similarly as outlined by Watt and Richardson (2007). Since the data fit the model, we can assume that the model is a good way of understanding the

data. This understanding allows us to combine the data for later analyses of group differences.

The configural model (grouped by rural and non-rural with no equality constraints) shows excellent fit with CFI = .97, TLI = .96, RMSEA = .085, $\chi^2(16) = 9.83, p = .88$. Additionally, all pathways as presented in Table 2 are statistically significant for both rural and non-rural groups and all factor loadings are above .40 except for item D1 (Rural schools: How carefully have you thought about becoming a teacher?), which loads at only .36, indicating adequate support for configural invariance. Two chi-square difference tests were then conducted, one between the configural and metric models, and one between the metric and scalar models. Non-statistically significant chi-square results for each as presented in Table 3 indicate support for both metric and scalar invariance, which indicates group differences between rural and non-rural groups can be assessed at the subfactor level.

Table 4
Model Comparison Chi-Square Results

Model	df	AIC	χ^2	$\Delta\chi^2$	Δdf	p
<i>Motivations for teaching</i>						
Configural	1198	55184	2346.70			
Metric	1224	55163	2377.80	31.09	26	.22
Scalar	1250	55143	2409.50	31.73	26	.20
<i>Perceptions of teaching</i>						
Configural	142	18382	227.00			
Metric	152	18370	236.32	8.32	10	.60
Scalar	162	18359	245.35	9.02	10	.53
<i>Reasons to become a teacher</i>						
Configural	16	10101	9.83			
Metric	20	10097	13.37	3.54	4	.47
Scalar	24	10089	13.89	.52	4	.97

Group Differences

The results of the multiple group confirmatory factor analysis suggest that any differences found between latent construct mean scores can be considered robust. Therefore, *t*-tests were performed between rural and non-rural subfactor scores. Statistically significant differences were found between six subfactors. Rural teachers scored significantly higher on three subfactors:

1. Fallback career, $t(488) = -2.26, p = .026, d = .22$
2. Job transferability, $t(488) = -2.63, p = .008, d = .26$
3. Time for family, $t(488) = -2.10, p = .036, d = .20$

Non-rural teachers score significantly higher on three subfactors:

1. Salary, $t(488) = -2.63, p = .038, d = .17$
2. Satisfied teaching, $t(250.13) = 2.53, p = .012, d = .27$
3. Social contribution, $t(249.76) = 1.98, p = .048, d = .21$

The important aspects of these results are the *p* and *d* values. The *t* values are used to determine the *p* values, thus focusing on the *p* values will increase our understanding of the differences between these groups. While statistically significant differences, indicated by the *p* values being less than .05, were found between rural and non-rural educators on each of these six subfactors, the rural or non-rural designation appears to have a smaller than expected effect (Morgan et al., 2020). The effect is measured by the *d* values, which indicates how large the difference is between the two group means. A *d* value of .50 is considered a typical or usual size for educational research (Morgan et al., 2020). Thus, the values of the *d*'s that were found are all smaller than expected.

Table 5 presents the means and standard deviations for each group by subfactor. The table has the subfactors in order, with the six subfactors that are statistically significantly different between the groups of rural and non-rural teachers listed first. Next, are the subfactors that were not statistically significantly different; they are listed with the two that had lower means for both groups than the middle

Table 5
Subfactor Means Between Non-Rural (n = 339) and Rural (n = 151) Teachers

Subfactor	Non-rural		Rural		<i>t</i>	<i>p</i>	95% CL	<i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>				
Fallback career	1.68	1.05	1.92	1.17	-2.26	.026	[-0.45, -0.03]	.22
Job transferability	2.94	1.41	3.31	1.45	-2.63	.008	[-0.64, -0.09]	.26
Time for family	3.08	1.41	3.37	1.51	-2.10	.036	[-0.57, -0.02]	.20
Salary	2.32	1.26	2.06	2.06	-2.63	.038	[0.01, 0.50]	.17
Satisfied teaching	5.61	1.12	5.29	1.33	2.53	.012	[0.07, 0.56]	.27
Social contribution	6.06	1.07	5.82	1.26	1.98	.048	[0.00, 0.47]	.21
Social status	3.00	1.09	3.05	1.20	-.49	.622	[-0.27, 3.05]	.04
Social influences	2.72	1.55	2.81	1.58	-.52	.600	[-0.38, 0.22]	.06
Social dissuasion	3.94	1.66	3.90	1.44	.27	.786	[-0.25, 0.33]	.03
Job security	4.24	1.50	4.07	1.55	1.18	.237	[-0.12, 0.47]	.11
Enhance social equity	5.08	1.56	5.14	1.54	-.39	.695	[-0.35, 0.24]	.04
Prior Experience	5.37	1.55	5.17	1.44	1.37	.192	[-0.10, 0.49]	.13
Work with children and adolescents	5.62	1.28	5.66	1.24	-.30	.763	[-0.28, 0.21]	.03
Intrinsic career value	5.68	1.05	5.53	1.12	1.41	.159	[-0.08, 0.35]	.14
Shape future of children and adolescents	5.79	1.10	5.86	1.13	-.61	.54	[-0.28, 0.15]	.06
Expertise	5.88	.92	5.81	1.04	.78	.439	[-0.11, 0.26]	.07
Ability	5.89	.98	5.87	1.03	.20	.840	[-0.17, 0.21]	.02
Difficulty	6.63	.56	6.65	.55	-.34	.731	[-0.13, 0.09]	.04

**df* = 488 unless the assumption of homogeneity of variance was violated, otherwise *df* is indicated in parentheses, and Welch's two-sample *t*-test was conducted.

of the scale (the FIT-Choice has a range from 1 to 7 so the middle is 3.5), then are the 10 subfactors that were not statistically significantly different between the groups but had higher means than the middle of the scale.

Discussion

The current study was conducted to better understand if a difference exists between rural teachers and non-rural teachers in their motivation to teach as measured by the FIT-Choice survey (Watt & Richardson, 2007). Having highly qualified teachers in all schools is a goal for many states and countries (Trinidad, et al., 2014). As Halsey (2017) stated in a government report out of Australia, “notwithstanding the efforts of governments, attracting and retaining the best teachers for regional, rural and remote schools continues to be one of the most persistent challenges on the ‘education agenda’” (p. 24). Thus, it is imperative to better understand and determine how to attract and retain teachers for schools in rural areas. The current study adds to this important discussion by providing statistical comparisons of the motivations of teachers who work in rural areas and who work in non-rural areas in a Midwestern state. Using the FIT-Choice survey (Watt & Richardson, 2007), teachers’ motivations, perceptions, and reasons for teaching were measured and compared across location (rural or non-rural).

The reason this study includes the model fit research question for FIT-Choice data from this sample of teachers is to understand the extent to which factors in the Watt and Richardson (2007) model serve as valid points of comparison for rural and non-rural groups of teachers. If it is established that the data fit the model, the factors proposed by the model can be used to interpret the data with as much confidence as these factors have been used in previous studies. As such, prior to using the model to answer the primary research question regarding differences between motivations for rural and non-rural teachers, this study first used multiple group

confirmatory factor analysis to establish that the Watt and Richardson model fit the survey data collected from rural and non-rural teachers in this study. The resulting satisfactory model fit implies that group comparisons on the factors in the model are robust.

Having established the appropriateness of group comparisons on the FIT-Choice factors in the model, findings related to similarities and differences between rural and non-rural teachers follow and are supported by the graphic illustration of the relationships in Figure 1.

As shown in Figure 1’s motivational factors, appearing in ovals at the top, six factors held statistically different motivational value for rural and non-rural teachers, although in practical terms, these differences were small. The box at the bottom of the figure lists factors with no differences between the groups. These findings show that rural and non-rural teacher perceptions of teaching were more similar than different, which is not surprising because state policies are in place that regulate many aspects of teachers’ work (Rothman, 2011), thereby ensuring that the nature of the work is similar regardless of setting. The two groups did not differ in their beliefs about being a good teacher, continuing to be interested in teaching, enjoying working with children and adolescents, being driven to enhance social equity, wanting to shape the future of children and adolescents, valuing job security, having had prior teachers as role models, and having friends and family who suggested they would be good at teaching. Additionally, both groups generally believed only limited social status is attached to teaching jobs, despite requirements of great expertise and being hard work. Lastly, both groups concurred that they were encouraged by family and friends to pursue careers other than teaching. Some of these findings are not unexpected given the skills and knowledge required for the work, policies that award nonprobationary status when certain conditions are met, and minimal state funding.

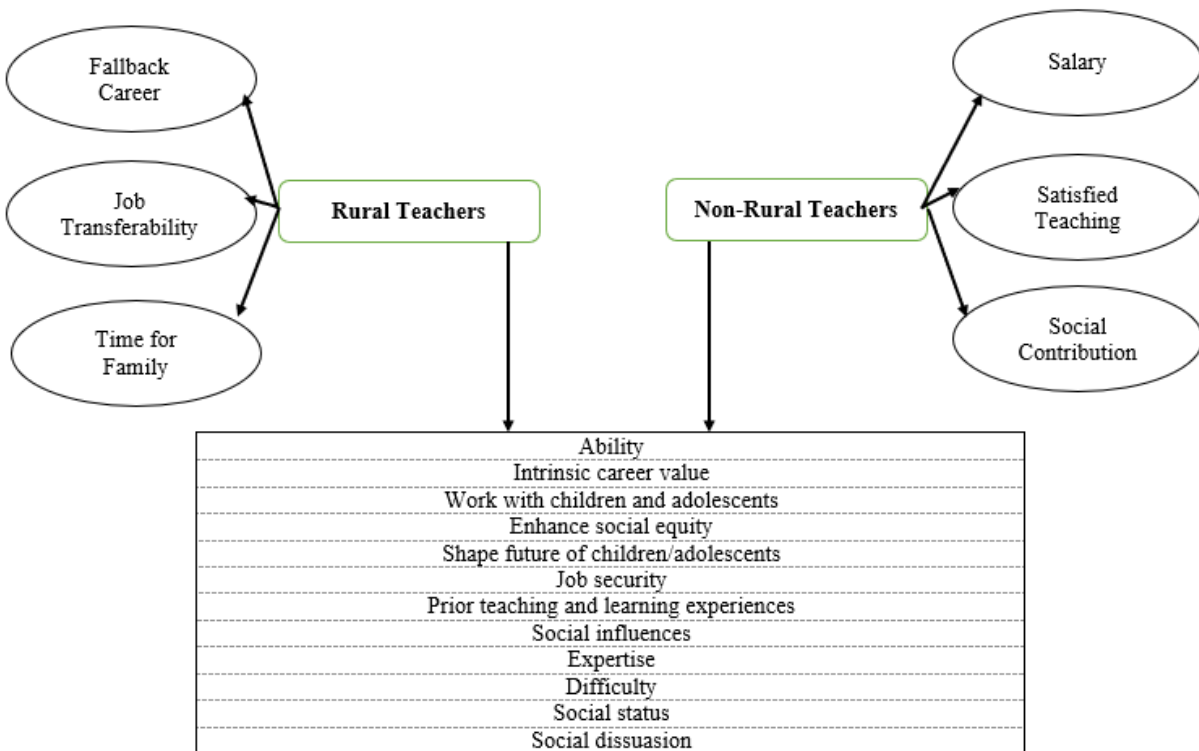


Figure 1: Similarities and Differences Between Rural and Non-Rural Teachers

Although the groups were similar on several factors, for a few factors teachers from rural areas had somewhat different views than their non-rural counterparts. As shown in Figure 1, teachers in rural areas were more likely to say that teaching was not their first choice for a career, but rather a fallback career; that they valued the transferability of their credential across schools and districts; and the additional time for family that a school schedule allows was very important. Because many rural teachers want to live in rural areas (Huysman, 2008; Oyen & Schweinle, 2020), it is likely they chose to teach because it is a viable job in their area. Rural schools struggle to attract many teachers because friends and family tend to be in urban areas (Kline & Walker-Gibbs, 2015), and many times family members find it difficult to get jobs in rural areas, which makes it difficult for them to move there (Kelly & Fogarty, 2015; Lyons, 2009). Thus, teachers who choose to teach in rural areas presumably have family and friends nearby and want to live there. Being able to live where they want to, spend more time with family, and keep career options open as opportunities arise in other schools and districts allows the rural teacher to prioritize lifestyle and family.

Relatedly, one of the other small differences was that rural teachers, while satisfied with their job

overall, were less satisfied with their job than non-rural teachers. Those working in a fallback career presumably would be less satisfied than those who were passionate about that career. Rural teachers, in general, were more motivated by practical considerations of job availability and having work schedules conducive to family life.

The importance rural teachers place on the practicality of their career has implications for retaining them and signals that rural teachers may benefit from somewhat different types of support because their intrinsic motivations for teaching may be, on average, different from non-rural teachers. For example, supportive working conditions, such as appreciation, respect, positive school culture, and professional development responsive to needs in rural settings, may be critical aspects of what encourages them to stay in what they view as a practical and portable job. This finding supports evidence from prior studies (Barley, 2009; Frahm & Cianca, 2001; Leech et al., 2022; See et al., 2020) and is encouraging because presumably school culture, appreciation, and respect are malleable factors that can be influenced by district and building leadership.

As policy interacts with place, these findings suggest that a one-size-fits-all policy model may warrant reconsideration related to specific topics. Although similar in many respects, rural and non-

rural teachers are not identical groups and perhaps the differences run deeper than teachers simply needing more exposure to a rural setting. For example, state recruitment policies, such as those that tie student loan forgiveness and preparation stipend awards to requirements to teach in rural areas for a specified amount of time post-award, will fill more rural teacher positions. At the same time, however, such a policy may shift the profile of early-career rural teachers and the extent to which they continue to teach in rural schools after their time commitment ends. The potential for job churn as the required years expire and these teachers leave for non-rural positions could be an unintended negative consequence. As one example, findings from this study suggest that perhaps it would serve schools better to target recruitment tactics toward grow-your-own programs and market them in rural areas as a way to produce teachers who live in the community and have ties to it. This approach would potentially motivate them to continue to teach regardless of whether it is a primary or fallback career choice. Similar policies that attempt to prioritize the practical

aspects of teaching serve as additional examples of policies worth pursuing or expanding. Relatedly, retention may warrant separate attention for rural and non-rural areas.

Limitations to the current study include the self-report survey methods and sampling from a single state. Participants may have responded differently through other means of data collection (i.e., observation). All participants were from the same state in the US, so state policies and regulations may impact their motivations to teach, which could make generalizing the results to teachers in other states or countries problematic.

Additional studies on rural teachers' motivations and how they compare to non-rural teachers are needed to contribute to research-based teacher recruitment and retention priorities. Further, as the landscape and legislation around recruitment and retention change, ongoing research is needed to assess the intended and unintended impact of new policies and existing ones and the appropriateness of maintaining the same policies in rural and non-rural areas.

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Suggested Citation:

Leech, D. J., Leech, N. L., McClintock, E., & Haug, C. A. (2023). Rural teachers' and non-rural teachers' motivations to teach: Differences and similarities. *The Rural Educator*, 44(4), 15–28.

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