

THE INFLUENCE OF STRESS AND SOCIAL
SUPPORT ON HEALTH PERCEPTIONS OF OLDER
ADULTS ON THE RURAL FRONTIER

By

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CHAPTER I

INTRODUCTION

Adding “life to years” is essential to improving quality of life among older adults residing in remote rural settings. Social relationships are also vital to improved quality of life and aging well in rural America (Rogers, 2002). In 1987, Antonucci and Akiyama proposed that the maintenance of close social ties benefits healthy well-being into old age. Investigations have reported that social support improves everyday mental and health functioning among old and very old adults (e.g., Baltes & Lang, 1997; Baltes & Smith, 2003; Fung, Carstensen, & Lutz, 1999; Krause & Borawski-Clark, 1995). In recent years, researchers have begun to address the importance of social resources among older adults residing in rural settings. Compared to older individuals living in urban areas, rural older adults typically report limited access to key social support figures (e.g., adult children and community leaders). This is evidenced by the fact that older adults in rural areas are often geographically distanced from family and friends, healthcare services, and other resources which are often easily found within urban areas.

Limited social resources can impact the health of older persons. Literature concerning rural aging has indicated that remote rural inhabitants are often older adults who are widowed, live alone, and have limited social resources (Rogers, 2002). In the mere absence of available social provisions, older adults tend to experience heightened feelings of stress (Cohen, 2004). Risk of feeling stressed may lead to health decline among older rural inhabitants (Rogers, 2002).

In particular, older adults who encounter a higher degree of daily stressors often experience a greater number of health problems (Carstensen et al., 2010). However, researchers have only recently begun to look for associations between the presence of social support relative to the impact of stress on perceived health among rural older adults. Although older rural adults experience isolation from immediate family ties, it should be noted that they are usually socially connected to informal support ties (i.e., neighbors, church community affiliates, and others; Rogers, 2002). Yet, the degree to which social relations benefit the health of older rural adults experiencing life event stressors warrants further investigation.

The purpose of this study was to address the stress-buffering hypothesis (Cohen & Hoberman, 1983; Cohen & Wills, 1985) within a group of community dwelling older adults age 65 to 101 years, residing in rural Oklahoma. Cohen and Wills (1985) hypothesized that supportive social ties reduce the deleterious effects of stress on health. Specifically, this study considered how social support influences the association between stress and perceived health status of remote rural older adults.

Data from the Rural Healthy Aging Project was used for this study's analyses. The Rural Healthy Aging Project was a pilot investigation of health and well-being among older adults ($N = 171$) residing in rural Oklahoma. Data for this study were collected during the summer of 2008. IBM SPSS Statistics (version 17.0) was used to conduct analyses. First, descriptive analyses of demographics and key study variables (i.e., stress, support, perceived health) were analyzed. Second, regression analysis using the Aiken and West (1991) method was applied. The third step involved addition of an interaction term (i.e., Stress X Support). The final step included post hoc analysis. This technique was used to examine the influence of stress and social support on perceived health

CHAPTER II

REVIEW OF LITERATURE

Can older adults residing in rural settings experience optimal health? Investigators have concluded that there are three components essential to optimal healthy aging. Rowe and Kahn (1997) posited that older individuals who avoid disease, maintain maximum cognitive and physical functioning, and remain socially engaged with life will age successfully. Rowe and Kahn (1997) acknowledged social ties as a key source of enhancement for quality of life in old age. Investigators have reported that aging brings increasingly negative changes such as physical impairment, cognitive decline, and social loss (e.g., Baltes & Lang, 1997, Baltes & Smith, 2003; Ebner, Freund, & Baltes, 2006), but the magnitude of such change is less pronounced in the presence of supportive social affiliations (Baltes & Lang, 1997). Social ties provide emotional support and instrumental assistance to help counter age-associated loss (Baltes & Lang, 1997). However, it is unclear to what degree social resources improve health among older adults encountering stressors within rural settings. Therefore, the purpose of this study was to determine whether social relationships reduce stress and enhance health perceptions among rural older adults. This study has implications relative to understanding the degree to which social support may reduce the noxious influence of stress on self-reported health. Results from this study will be used to recommend how rural aging service providers and other practitioners may use social resources to promote the health of old and very old adults.

Theoretical and Conceptual Considerations

Baltes (1997) proposed three developmental assumptions to theoretically explain health in old and very old age. First, evolutionary selection benefits decrease with age. In other words, Baltes posited that an optimal sense of health declines with advancing age. For instance, as persons reach late and very late adulthood, they encounter increased age-associated stressors (e.g., cognitive decline, economic insecurity, and loss of family and friends), which weaken resilience to threatening health conditions. Lazarus and Folkman (1984, p.19) asserted that stressful life experiences might be described as an appraisal by the individual as “taxing or exceeding his or her resources and endangering his or her well-being”. Age-associated stressors require individuals to seek resources for purposes of adaptation. Second, age-associated stressors increase an individual’s need for greater socio-cultural provisions (e.g., additional instrumental and emotional support from others), which help sustain an optimal sense of health. Greater reliance on others for instrumental and emotional assistance in the presence of age-associated stressors is believed to aid adaptation by enhancing positive health perceptions. Researchers have argued that the degree of support received in old and very old age may enhance perceived health. Third, resilience is a dynamic of human health and survival. By the time persons reach old-old age, they have a depleted biological reserve capacity to offset the noxious influence of age-associated stressors. According to Baltes (1997), socio-cultural provisions may be rendered ineffective relative to improving health or diminishing risk of mortality.

Researchers have hypothesized that social resources can explain improved well-being in later years. For example, Cohen and Wills (1985) defined stress as an ongoing condition, which can interfere with normal daily activity; whereas social support is a subjective process involving an individual’s perceived belief of interpersonal benefit of relying on others despite personal adversity. Cohen and Wills (1985) proposed that social support was an essential “stress-buffering” component of health status. Framed as the “stress-buffering hypothesis,” Cohen and Wills (1985) theorized that social support provides a protective “buffer” against stress encounters

in the promotion of health. In particular, Cohen and Wills (1985) posited that a greater degree of support from interpersonal ties reduces the degree to which stress compromises an individual's health. In turn, it can be argued that the degree of support received in later life may reduce feelings of stress and improve health functioning.

Stress, Social Support, and Older Rural Adults

However, it is important to note that many older rural adults have limited access to basic social resources. Rural counties often lack institutional structure needed for providing services to older adults (Rogers, 2002). Lack of structure for services is most likely due to low geographical proximity. In other words, rural inhabitants reside at a greater geographic distance from immediate family or kin as well as modern conveniences such as transportation, health clinics, or aging service agencies (Rogers, 2002; Stain et al., 2008; Yoon & Lee, 2006). Investigators have reported that poor social resource accessibility exacerbates feelings of stress and increases negative health perceptions (e.g., Gilroy, 2006; Russell & Curtona, 1991; Stain et al., 2008; Torres, McCabe, & Nowson, 2010; Wallace, Weeks, Wang, Lee, & Kazis, 2006). As persons reach advanced old age, social support becomes an essential element by which health functioning is rated (Ozaki, Uchiyama, Tagaya, Ohida & Ogihara, 2007).

Yet, many older adults rely on informal sources of support (e.g., neighbors or church community members) relative to personal or health-related assistance (Krause, Shaw, Liang, 2011). Reliance on informal social ties among rural older adults is counterintuitive to what is generally reported within gerontological literature. For instance, Bengston (2001) reported persons reaching late and very late life tend to seek greater social assistance from immediate family ties. Reliance on informal social ties may be one plausible explanation of why older persons residing in rural communities retain strong feelings of social cohesion despite geographic distance (Stain et al., 2008). Additionally, older adults who are supported and revered by others within the community context also report a higher degree of positive well-being (Kaufman, Kosberg, Leeper, & Tang, 2010). Segrin and Passalacqua (2010) noted that social closeness to

others within community provides a meaningful connection, which often results in a feeling of being appreciated and valued. For example, members of church communities often represent “fictive kin” relations among older adults who are geographically isolated from biological family (Marks, 2005). Thus, it may be argued that older adults in rural areas may experience social isolation from immediate family or kin relations, yet they possess additional social and community connections that help facilitate positive perceptions of well-being in the absence of family.

In addition, Krause and Borawski-Clark (1995) reported that rural inhabitants who are geographically separated from informal support ties (e.g., immediate family and kin) typically rely on a more selective social network within rural communities. Krause and Borawski-Clark (1995) believe the greatest protective buffer against stress is from the quality of support rather than the number of supportive ties a rural older adult possesses. However, the ability to identify a large number of available close formal or informal social ties for quality assistance becomes more difficult as persons reach advanced old age (Antonucci & Akiyama, 1987). Older adults difficulty in identifying available social ties may be due to selectivity in deciding which interpersonal ties to use relative to coping with everyday stressors (Folkman & Lazarus, 1988; Lazarus & Folkman, 1984). In developing the socio-emotional selectivity theory, Carstensen, Isaacowitz, and Charles (1999) proposed that as people survive into advanced old age they begin to perceive time as limited. This perception influences greater selective preference relative to reliance on social ties which contribute in helping the older adult meet his or her everyday aspirations and goals. Older adults generally select social affiliations who provide the greatest degree of emotional benefit and energy in the presence of adversity (Fredrickson & Carstensen, 1990; Löckenhoff & Carstensen, 2004). Perhaps, many rural older adults rely on a select number of formal and informal supportive ties during stress encounters. The degree to which formal and informal social provisions may improve health warrants further investigation.

Social Support and Perceived Health

Social relationships have been reported to have positive health effects across diverse aging populations. For instance, Bishop (2008) reported that social affiliations are associated with the degree to which age-associated stressors are related to health outcomes among older populations residing in socially isolated communities. Yet, older adults residing in rural settings often demonstrate a preference for self-reliance and autonomy (Kivett, Stevenson, & Zwane, 2000). Low availability of social resource infrastructure often influences older rural inhabitants to practice greater self-reliant behaviors (Rogers, 2002). For instance, many rural older adults need instrumental assistance relative to completing household chores (e.g., cleaning, cooking meals, or shopping; Kivett, Stevenson, & Zwane, 2000). However, older rural adults often attempt to complete instrumental tasks on their own before seeking assistance (Kivett, Stevenson, & Zwane, 2000). Social ties of older adults may misinterpret self-reliant behavior among rural older adults as being emotionally distant and self-centered (Kivett, Stevenson, & Zwane, 2000). However, some older individuals may prefer to rely on their own inner strengths rather than depend on others (Kivett, Stevenson, & Zwane, 2000). Dependent behavior may be considered by the rural older adults as an outward sign of age-associated decline. In turn, older rural adults may consider social support only when complex health-behaviors are necessary (e.g., following medical orders, taking medications, or managing physician recommend dietary restrictions; Ory, Jordan, & Bazzarre, 2002; Segrin & Passalacqua, 2010). Thus, social support may share an association with health outcomes in late and very late adulthood.

Most health practitioners consider perceived health status as a critical indicator and outcome of successful aging (Idler & Benyamini, 1997; Jylha, 2009). Perceived health refers to globally evaluated perceptions of one's own vulnerability to illness or disease relative to current enjoyment and involvement in everyday tasks of living (e.g., social activities, physical exercise, instrumental tasks of living; Fillenbaum, 1988; Wolinsky & Johnson, 1992). Self-assessed health has also been associated with having predictive power on mortality (Erdogan-Ciftci, van Doorslaer, d'Uva, van Lenthe, 2010; Idler & Kasl, 1991; Schoenfeld, Malmrose, Blazer, Gold, &

Seeman, 1994). According to Rogers (2002) older adults residing in rural areas do not favorably assess their health (e.g., good or excellent) compared to their urban counterparts. Older adults who perceive their health negatively are six times more likely to experience early mortality than those possessing a positive view of their current health (Hawkley et al., 2008; Idler & Kasl, 1991). Researchers have reported that social support is a key-contributing factor associated with improved subjective health ratings in old age (Krause, 1997). In particular, social support has often been acknowledged as a key determinant associated with reducing negative health perceptions and increasing positive perceptions of health (Erdogan-Ciftci et al., 2010; Segrin & Passalacqua, 2010). Although researchers have suggested an empirical association between social support and perceived health, the mechanism by which this association improves health perceptions across various older adult populations remains unclear (Erdogan-Ciftci et al., 2010; Wolinsky & Johnson, 1992). This study will be used to further examine the connection of social support and perceived health within a sample of community-dwelling rural older adults.

Hypotheses

Although there is empirical evidence to support a link between stress, support, and perceived health in late adulthood, only recent studies have begun to analyze whether this remains true within older adult populations residing in remote rural locales. Therefore, the purpose of this study was to test the stress-buffering hypothesis (Cohen and Wills, 1985) with a sample of older adults in remote areas. The following hypotheses were constructed:

H₁: Stress will have a negative direct association with health.

H₂: Social support will have a positive direct association with perceived health.

H₃: Greater degree of social support will be associated with a decrease in the influence of stress on health.

CHAPTER III

METHODS

Data for this study originated from the Rural Oklahoma Healthy Aging Project. Rural Healthy Aging Project data was collected during the summer of 2008. Participants included a total of $N = 171$ ($n = 51$ men; $n = 120$ women), community dwelling persons age 65 and older. Participants were from several rural areas in Oklahoma. Participant sampling was conducted based on two considered definitions of “rural.” First, participants were required to reside in Oklahoma counties designated as “non-metro” by the U.S. Office of Management and Budget Metropolitan Statistical Areas (2005). Second, participants were required to reside within communities of 2500 persons or less. This conforms to the U.S. Census Bureau, Geography Division (2010) definition of “rural”. Five counties met the criteria of being “non-metro” (i.e., Alfalfa, Dewey, Ellis, Grant, and Harper). Personnel from the following locations were used to recruit participants: nutrition sites, activity centers, Oklahoma Department of Human Services aging division, Area agency on Aging, and OCES offices.

Procedure

Participants were given the Short Portable Mental Status Questionnaire (SPMSQ) as a cognitive screening to identify those who would need assistance with reading, writing, and comprehension (Pfeiffer, 1975). The SMPSQ was specifically designed for use with older populations and is commonly used as a screening instrument for cognitive orientation. In

development of the test, participants aged 65 and older were used for test-retest correlations, which were reported to have high internal stability at 0.82 and 0.83 (Pfeiffer, 1975).

Measures

Life Event Stress. Life event stress was assessed for the Rural Oklahoma Healthy Aging Project with the Elders Life Stress Inventory (ELSI; Aldwin, 1990). The ELSI includes thirty-one dichotomized items (0 = *No*; 1 = *Yes*), used as an index to appraise health stressors (e.g., injuries and illness, deteriorating relationships with someone other than child or spouse, and death of a grandchild). A summary score was used in the current study. The ELSI score is cumulative with a higher score indicating high stress and low score indicating low stress. According to Aldwin (1990) the internal reliability of the ELSI is .62.

Social Resources. Social support or social resources for the Rural Oklahoma Healthy Aging Project was assessed using the Social Provisions Scale. This scale uses six subscale measures and asks questions regarding life purpose, usefulness to others, and ability to rely on others. Sums of the scores show high or low support by a high or low score. The Social Provisions Scale has been shown to have internal reliability of .92 (Curtrona & Russell, 1987).

Perceived Health. Perceived health of participants for the Rural Healthy Aging Project was assessed with 2-items from the Duke Older American Resources and Services Procedures scale (OARS; 1 = *poor*; 4 = *excellent*) (1 = *great deal*; 2 = *little/some*; 3 = *not at all*). The OARS measures five areas of function: social capital, economic resources, cognition, physical fitness, and activities of daily life. This scale was shown to have alpha reliability .70 (Fillenbaum, 1988).

Analyses

IBM SPSS Statistics (version 17.0) was used to analyze the data. First, descriptive statistics (e.g., frequencies, means) of demographic as well as key study variables were assessed. Second, regression analyses were used to assess association between stress, social support, and perceived health. In particular, the Aiken and West (1991) procedure was used as the primary analytic technique. This method requires three steps. First, key study variables were transformed

into standardized summary scores. Summary scores allow for analysis of specific variables, which were useful for determining moderating effects on perceived health. Second, the direct effects of individual predictor variables on perceived health were examined. Significant interactions are also reported in the results section of this study. Therefore, the third step involved addition of an interaction term Stress X Social support. A final step entailed post hoc which showed whether the slopes of the simple regression lines were significantly different from zero and whether the slopes of the regression were significantly different from each other (Aiken & West, 1991). In other words, post hoc analyses determined whether low degree of support or high degrees of support were significantly associated with health perceptions.

CHAPTER IV

RESULTS

The sample included older adults age 65 and older ($Mage = 77.46$ years, age range: 65-101, $SD: 8.24$) who live in rural Oklahoma. Males made up 29.8% ($f = 51$) and females 70.2% ($f = 120$). Ethnic distribution included 169 White/Caucasian and 1 Hispanic/Latin as well as 1 Asian/ American. Marital status was as follows: 49.7% Married, 41.9% Widowed, 1.8% Never-Married, and 6.6% Divorced or Separated. Descriptive statistics relative to key findings were further analyzed and have been summarized in Table 1.

Table 1
Descriptive Results of Study Variables

Variables	Range	Median	Mean	<i>SD</i>
Life event stress	0-12	3.00	3.29	2.44
Social Support	49-93	75.00	74.77	9.75
Health Impairment	0-13	3.00	3.51	2.27
Perceived Health	4-14	10.00	9.75	2.11

Regression analyses determined the association between social support and perceived health in the presence of stress (see Table 2). Independent direct effects of stress and social support on perceived health were first analyzed. Only stress emerged as having a significant direct negative association with perceived health. This is seen in Table 2 (Model 1), which

represented the Direct Effect model. Model 2 represented the Moderation model. The Moderation model involved the inclusion of a Stress X Support interaction term. In Model 2, stress maintained a negative direct association with perceived health ($\beta = -.37, p < .01$). However, a significant two-way interaction also moderated between stress and support ($\beta = -.21, p < .05$). This indicates that greater support diminishes the associated magnitude of stress on health.

Table 2
Regression of Key Variables

Variable	B	SE	β	Perceived Health	
				R ²	ΔR^2
Model 1 (Direct Effect)				.13	.13
Stress	.31	.10	-.31*		
Support	.15	.10	.15		
Model 2 (Moderation)				.17	.03*
Stress	-.37	.10	-.37**		
Support	.15	.09	.15		
StressXSupport	-.19	.09	-.21*		

* $p < .05$; ** $p < .01$

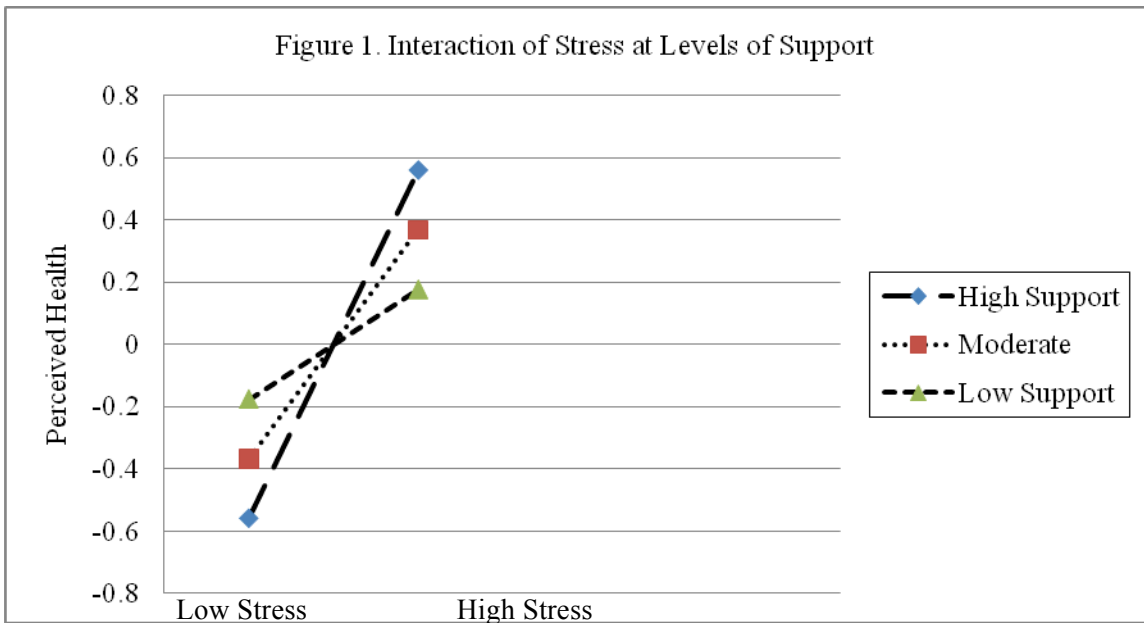
To further this study, post hoc analysis was completed to determine whether high or low support was responsible for this association. Simple slope of high and low support was conducted and there was no statistically significant interaction. This means high and low degrees of support are not significant from a mean of 0. Furthermore, the difference between the regression lines of high and low degree of support was not significantly different. Thus, it appears that support is associated with a decline in stress regardless of the degree that may be provided.

The magnitude by which stress is reduced at varying degrees of social support was considered. Table 3 shows the regression equation of perceived health on stress at differential levels of support.

Table 3
Regression of Perceived Health on Stress at Levels of Support

	SD	Regression Equation
At High Support	>1.0	$y = .121 - .559x$
At Moderate Support	=0	$y = -.03 - .368x$
At Low Support	<1.0	$y = -.18 - .177x$

In Table 3, High Support reduced stress the most ($y = .121 - .559x$), whereas low degree of support diminished stress but this reduction was lower ($y = -.18 - .177x$, see Figure 1).



CHAPTER V

DISCUSSION

A primary goal of this study was to better understand the association between stress, social support, and perceived health among older adults residing within rural settings. Relative to results, three key findings emerged. First, greater life event stress appears to diminish positive health perceptions. Second, social support did not maintain a direct association with perceived health. Third, a higher degree of social support is associated with a reduction in the noxious influence life event stress on perceived health. Therefore, the original hypotheses were partially confirmed by the results.

It was originally hypothesized that stress would have a negative direct association with perceived health. Results from this study supported this hypothesis. In particular, greater life event stress maintained a direct negative association with poorer health perceptions. Dannefer (2003) reported that greater life event stress in old and very old age often stems from non-normative or off-time experiences (i.e., natural disaster, work accident, or personal injury). When unexpected stressors occur, geographic distance may exacerbate the degree to which such non-normative or off-time life experiences require assistance from social network affiliations (Dannefer, 2003; Hautaniemi Leonard & Gutmann, 2005). It may be that the culmination of stressful life events reduces positive health perceptions in later life (Dannefer, 2003). Rogers (2002) claims that many older adults residing in rural settings are geographically isolated from

family or informal supportive ties. On that same note, Dannefer (2003) agrees with Rogers (2002) that non-normative or off-time events can further deteriorate individual's perceptions of health (e.g., ability to protect or care for self). Further investigation of how geographic location may be associated with introducing stress in the lives of rural older adults is warranted. Nonetheless, results from this study bring confirmation that stress appears to be associated with poor health perceptions.

A second key finding of this study involved the association between support and perceived health status. It was originally hypothesized that social support would have a positive direct association with perceived health. However, this association did not emerge within the sample of interest. In other words, greater social support was not significantly associated with positive health perceptions. Social support may not have a direct association with perceived health due to the specialized sample of rural older adults used in this study. Many of these participants resided in communities and counties that are sparsely populated. Therefore, it is possible that having fewer and more selective social ties for assistance is normative. Relative to socioemotional selectivity theory (Carstensen et al., 1999), it assumed that older adults become more selective relative to what types of assistance they may desire as well as from whom they may accept assistance. Carstensen et al. (1999) acknowledged that older persons generally rely on others who provide the greatest degree of emotional benefit relative to meeting personal and life sustaining needs or goals. In some cases, older adults may require emotional support but receive informational support, which may not fulfill a preference for emotionally and meaningful social assistance (Lang, 2001; Lang & Schütze, 2002). Lang and Schütze (2002) reported that socioemotional selectivity often contributes to adaptive relationships, in which meaningful experiences are most apparent within social relationships associated with health functioning. For example, older adults experiencing poor health perceptions may receive greater emotional benefits from a formal or paid care-giving professionals (e.g., physician or nurse) rather than an informal care provider (e.g., family member, friend, or neighbor). The concern is not that older

rural adults fail to accept help from others to sustain a positive health outlook; it may be more of a matter of limited opportunity in acquiring the social resource of best fit. Results from this study provide empirical evidence that social support is not directly associated with perceived health in older rural adults. Perhaps, this is due to the fact that rural older adults have specific mental and physical health needs, which have yet to be adequately addressed.

When health needs are neglected in old and very old age, the association of poor health perceptions and mortality increase. In particular, older adults who maintain negative health perceptions are six times more likely to experience mortality than those possessing a favorable view of health (Hawkey et al., 2008; Idler & Kasl, 1991). Researchers have reported that social support may represent the difference between negative versus positive health perceptions in old age (e.g., Erdogan-Ciftci et al., 2010; Segrin & Passalacqua, 2010). Results from this study help to further confirm social support as a protective resource of health perceptions in the presence of stress.

A final finding of this study involved the interaction between stress and support on perceived health. It appears that greater social support bolsters positive health perceptions despite stressful life events. This finding provides empirical support for the “stress-buffering” hypothesis (Cohen & Wills, 1985). In other words, social support provisions help buffer the noxious influence which life event stress has on positive health perceptions of rural older adults. This suggests that social support serves to keep positive health perceptions intact despite adverse life experiences. These results coincide with other investigators who have noted that social support improves everyday health functions in late adulthood (e.g., Baltes & Lang, 1997; Fung, Carstensen, & Lutz, 1999; Krause & Borawski-Clark, 1995; Krause, Shaw, & Liang, 2011). Improved health may be explained by anticipatory support (Shaw, Krause, Liang, & Bennett, 2007). According to Shaw, Krause, Liang, and Bennett (2007) anticipated support is trust that aid would be readily available if the need arose in times of stress. Thus, certain types of support (i.e., informal, formal, informational, emotional, filial, anticipated) may help preserve positive health

perceptions despite negative life events. Further research is needed to clarify how the exchange and reciprocity involving types of support benefit the health of rural older adults.

Based on results from this study, the associated reduction in stress is most salient in the presence of increasing degrees of social support. This finding may seem counterintuitive relative to older rural sample populations. The majority of rural older adults are comprised of widowed White/Caucasian women who live alone, are geographically isolated from health-related services, and reside at a distance from family or social ties (Arcury, Quandt, Bell, McDons & Vitols, 1998; Rogers, 2002). In addition, the rural communities in which these individuals reside often lack the social capital and healthcare infrastructure to aid health promoting behaviors within an aging population (Yoon & Lee, 2006). The fact of living alone coupled with low geographic proximity to formalized social ties and community resources often contributes to a reduced sense of healthy well-being (Yoon & Lee, 2006). However, stress reduction among rural older adults may involve external or adaptive buffering behaviors (Yoon & Lee, 2006). In other words, older adults in rural areas may be more self-reliant than their counterparts in metropolitan areas, however they must rely on informal supportive ties peripheral to their normative social network. This is especially true in circumstance of “extreme” stress conditions, which demand immediate assistance beyond one’s normative social affiliations (Yoon & Lee, 2004, 2006). Thus, it can be argued that informal support ties are just as effective as formalized support resources in helping to diminish stress and improve positive health perceptions among rural older adults.

Rogers (2002) reported that high quality social connections in rural environments often include persons such as nearby neighbors, church community, and non-political community leaders. Investigators have acknowledged that when older rural adults rely on others within their community, it often improves social cohesion (Nygren, Norberg & Lundman, 2007). This may contribute to a close and selective social network of informal ties that provide gratifying emotional benefits which contribute to more favorable views of health among those who are aging (Carstensen, Isaacowitz, & Charles 1999; Carstensen et al., 2010). Furthermore, it is

possible that informal ties allow rural older adults to feel more optimistic or happier during adverse life events. It can be argued that the greater the degree of support the better one's emotional disposition relative to coping with stressful life experiences. In turn, rural older adults feel better about their health despite threatening life conditions or circumstances.

Limitations

Although this study provides support for the stress-buffering hypothesis, limitations should be noted. First, this study involved a sample of cognitively intact and community dwelling older adults who were convenience sampled. In addition, all participants were screened for cognitive health problems prior to participation. These methodological processes may have introduced a sample selection effect, which resulted in a homogeneous participant pool of persons who may have been better educated, healthier, and more willing to participate in survey research. Therefore, caution should be used in generalizing results from this study to older persons who may be less educated or homebound. Second, the data used in this study involved a cross-sectional design; such designs cannot be used to interpret change over time. A third limit of this study was the absence of a control group. Participants of this data fit a specific definition of rural, which limits generalizability to older adults who may be located in metropolitan areas. In other words, this study did not involve a control group of metropolitan older adults. Finally, results of this study are based on quantitative measures of stress, support and perceived health. Therefore, results of this study may be due to more complex phenomena in rural older adults. The use of a more qualitative assessment or mixed-methods may have resulted in better conceptualization and understanding of the stress-buffering phenomena.

Implications and Future Directions

Despite limits in this study, results have implications for improving quality of life for older rural inhabitants. Gerontologists, geriatric healthcare professionals, nutrition site directors, and activity coordinators as well as other applied practitioners should use information from this study to develop programs and services (e.g. support groups, community clubs) congruent to

needs of persons aging in rural settings. Implementation of this knowledge through programs such as health literacy education, community support groups, or companionship services could improve social functioning and well-being among older rural residents. Future research on social networks of older adults would benefit from use of qualitative methods such as hierarchical mapping with the convoy model, which better explain who the meaningful social ties of older adults actually are (Antonucci & Akiyama, 1987). Future research should also focus on identifying how specific life-event stressors, types of support provisions, and reciprocated support exchanges (e.g., activity, financial, emotional) diminish or promote health among older rural adults.

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Title of Study: THE INFLUENCE OF STRESS AND SOCIAL SUPPORT ON
HEALTH PERCEPTIONS OF OLDER ADULTS ON THE RURAL
FRONTIER

Pages in Study: 27

Candidate for the Degree of Master of Science

Major Field: Human Development and Family Science with an option in Gerontology

Scope and Method of Study: This study tested the stress-buffering hypothesis (Cohen &

Wills, 1985) on older adults living in rural Oklahoma. Participants included

majority female, Caucasian, older adults aged 65 and older from rural Northwest

Oklahoma. The Aiken and West (1991) method was used to analyze the

independent effects of stress and support as well as the moderating effects of

social resources on stress relative to perceived health. Analysis also determined if

low levels of support or high levels of support were required to effect perceived

health.

Findings and Conclusions: Relative to results, three key findings emerged. First, greater

life event stress appears to diminish positive health perceptions. Second, social

support did not maintain a direct association with perceived health. Third, a

higher degree of social support is negatively associated with a reduction in the

noxious influence of life event stress on perceived health. Therefore, the original

hypotheses were partially confirmed by the results.

ADVISER'S APPROVAL: Dr. Alex Bishop
