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Personal Problems Among Rural Youth and Their Relation to Psychosocial Well-Being

Tommy M. Phillips

Mississippi State University, TPhillips@humansci.msstate.edu

Brandy A. Randall

North Dakota State University, Brandy.Randall@ndsu.edu

Donna J. Peterson

Mississippi State University, donna.peterson@msstate.edu

Joe D. Wilmoth

Mississippi State University, jwilmoth@humansci.msstate.edu

Lloyd E. Pickering

drlep@comcast.net



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Personal Problems Among Rural Youth and Their Relation to Psychosocial Well-Being

Abstract

To understand stressors experienced by rural adolescents and their relationship to psychosocial well-being, high school students completed the Personal Problems Checklist for Adolescents and three measures of well-being. The most frequently reported problems were in social/friendship and parental domains. The most commonly reported individual problem was "Not having any privacy." Analyses indicated significant associations between problems reported and well-being. As age increased, problems reported in parental, dating, and crisis domains decreased. Girls reported more problems than boys in the parental domain, as did participants in stepfamilies. Extension and 4-H programs may help ease the effects of stressors on rural youth.

Tommy M. Phillips
Assistant Professor
School of Human
Sciences
Mississippi State
University
Mississippi State,
Mississippi
TPhillips@humansci.msstate.edu

Brandy A. Randall
Associate Professor
Department of Human
Development and
Family Science
North Dakota State
University
Fargo, North Dakota
brandy.randall@ndsu.edu

Donna J. Peterson
Assistant Extension
Professor
School of Human
Sciences
Mississippi State
University
Mississippi State,
Mississippi
donnap@ext.msstate.edu

Joe D. Wilmoth
Associate Professor
School of Human
Sciences
Mississippi State
University
Mississippi State,
Mississippi
JWilmoth@humansci.msstate.edu

Lloyd E. Pickering
drlep@comcast.net

Introduction

In 1991, *JOE* published results of a study of Extension home economics professionals identifying current research needs (Branan & Rohs, 1991). The fourth-ranked item (from a list of 96) was "effects of stress on children and teens." Since 1991, a great deal of research has been conducted on this topic, but most research exploring adolescent stress has been based on urban samples (e.g., Bennett & Miller, 2006; Self-Brown, LeBlanc, & Kelley, 2004). Despite the fact that approximately 25% of the nation's youth live in rural areas (Dunn et al., 2008), where stress research is concerned, rural youth have been an understudied, neglected population (Evans, Vermeylen, Barash, Lefkowitz, & Hutt, 2009).

Stress is prevalent in the lives of adolescents (Byrne & Mazanov, 2002), with most reporting a large number of daily experiences perceived as stressful (Tessner, Mittal, & Walker, 2011). The current

study was undertaken to learn about the types and frequencies of stressors reported by rural adolescents and the relationship between personally experienced stressors and psychosocial well-being. We hope our findings will improve understanding of rural adolescent stressors and lead to effective programming to help adolescents with these issues. Given the work of Extension in promoting health and well-being as well as the role of 4-H in the lives of many rural youth, Extension is primed to address adolescent stress through its traditional programs or new prevention/intervention programs.

Adolescent stress is a major concern because of its link to various maladaptive physical, behavioral, social, and emotional outcomes (Bennett & Miller, 2006; Byrne & Mazanov, 2002; Crosby, Freed, & Gabriel., 2006; Elgar, Arlett, & Groves, 2003; Guthrie, Guthrie, Young, Boyd, & Kintner, 2002; Sim, 2000; Youngs & Rathge, 1990; Zimmer-Gembeck & Skinner, 2008). For example, higher levels of stress in adolescents have been linked to depression, suicidal behavior, anxiety, externalizing behaviors such as aggression and antisocial acts, and a heightened risk of drug and alcohol abuse. In general, stressors fall into one of two categories: major life events and daily hassles (Sim, 2000). While major life events occur less frequently, daily hassles are a common feature of everyday life (Sim, 2000). Most studies of adolescent stress have focused on major life events, yet research shows daily hassles are more predictive than major life events of maladjustment (Self-Brown, LeBlanc, & Kelley, 2004; Sim, 2000), and those reporting higher levels of daily stress should be considered at greatest risk for poor adjustment (Self-Brown et al., 2004). Therefore, the emphasis in the present study was everyday problems (or daily hassles) rather than major life events.

Method

Participants

Participants were 99 adolescents (57 boys, 42 girls) attending a rural high school in the southeastern United States. The mean age was 15.16 years ($SD = 2.44$). The sample was 52% White and 41% African American, with the remaining participants reporting other ethnic backgrounds. In terms of family type, 41% of participants reported living in intact nuclear families, 21% in stepfamilies, 25% in single-parent families, and 11% in other family arrangements. Fifty-eight percent of participants reported receiving either free or reduced-price school lunches.

Measures

Participants completed the Personal Problems Checklist for Adolescents (PPCA; Schinka, 1985). The PPCA consists of 240 items and surveys problems experienced personally in 13 areas: social, job, parents, school, money, religion, emotions, appearance, family, dating, health, attitude, and crises, e.g., "feeling unpopular" [social domain], "parents fighting or arguing" [parental domain], and "getting bad grades" [school domain] (Schinka, 1985). The job domain was omitted from present analyses because most participants reported not engaging in paid employment. In addition to an overall score, subscale scores provide information regarding specific domains of reported problems. The PPCA demonstrated excellent overall reliability ($\alpha = .99$), and subscale reliabilities ranged from good (.82) to excellent (.93). The mean number of total problems reported by the adolescents in the study (excluding the job domain) was 28.55 ($SD = 23.79$), with number of problems ranging

from 0 to 99 out of a possible 220. There were significant correlations between most subscales of the PPCA, indicating that problems in one domain tend to be co-morbid (i.e., they co-occur) with problems in other domains.

Participants also completed three measures of psychosocial well-being. First, self-esteem was assessed using a five-item version of the Rosenberg Self-Esteem Scale (Rosenberg, 1979). Phillips and Pittman (2007) have reported an acceptable alpha of .78 for the short version of the scale. Scores could range from 5 to 20, with this sample's mean self-esteem score being 15.00 ($SD = 4.06$).

Second, hopelessness was measured using five items from the 10-item Hopelessness Scale for Children (HSC; Kazdin, French, Unis, Esveldt-Dawson, & Sherick, 1983). A sample item from the HSC reads, "I never get what I want, so it's dumb to want anything." The HSC has acceptable reliability of .71 (Kazdin et al., 1983). For the study, the true-false response format was replaced with a 4-point Likert-type response format. Total hopelessness scores could range from 5 to 20, with higher scores indicating a greater sense of hopelessness. The mean hopelessness score for this sample was 9.00 ($SD = 3.77$).

Third, delinquent attitudes were assessed using the Delinquent Attitude Scale (Widmer & Weiss, 2000). Respondents indicated on a 4-point Likert-type scale the degree to which they either endorse or oppose 13 acts of delinquency (e.g., "Hit or threaten to hit someone without any reason"). Scores could range from 13 to 52, with higher scores indicating greater endorsement of delinquent acts. The measure demonstrates good internal consistency. Reliabilities have been reported as .84 and .88 (Phillips & Pittman, 2007; Widmer & Weiss, 2000). The mean delinquent attitude score for the present sample was 24.60 ($SD = 9.48$).

Procedure

Surveys were group-administered to participants during school hours by the first author with the assistance of school staff. No personally identifying information (e.g., name) was collected. Participants were entered in a drawing for three \$50 (U.S.) gift cards from a major retail chain, with the drawing being held by school personnel immediately after all questionnaires were completed. All participants received token souvenirs from a nearby major university. The study was approved by the institutional review board at the first author's university at the time of the study.

Results

Problems Reported in Each Domain

Adolescents reported the highest level of problems in the social/friendship and parental domains (Table 1). Eighty percent of participants reported at least one problem in the social domain. Other areas where at least two-thirds of participants reported at least one problem included parental, appearance, school, and family domains.

Table 1.

Means and Standard Deviations for Number of

Problems Reported in Each Domain and Percent of
Participants Reporting at Least One Problem in
Each Domain

Domain	<i>M</i>	<i>SD</i>	% Reporting At Least 1 Problem
Social	4.05	6.04	80
Appearance	1.95	1.96	70
Attitude	1.49	2.06	58
Parents	3.36	3.74	74
Family	2.71	2.95	76
School	2.70	2.76	69
Money	1.84	2.11	62
Religion	0.89	1.54	44
Emotion	2.68	3.30	59
Dating/Sex	2.01	2.55	58
Health	2.18	2.58	62
Crises	1.81	2.40	53

The 10 most frequently reported individual problems are listed in Table 2. The most common problem, reported by 35% of the sample, was "Not having any privacy." A majority of the most frequently reported problems among participants involved relationships (i.e., with parents, siblings, or others outside of the family). Participants were least likely to report problems in the religious domain.

Table 2.
Ten Most Commonly Reported Problems and
Percent of Respondents per Problem

Problem	Percent
Not Having Any Privacy	35
Not Getting Along with Other People	34
Being Criticized by Others	33
Being Shy	33
Parents Being Too Strict	33

Parents Disapproving of Boyfriend/Girlfriend	31
Arguing with Brother or Sister	31
Being Bored in School	31
Being Let Down by Friends	30
Wasting Money	29

Participant age was related negatively to problems in the parental domain ($r = -.22, p < .031$), dating domain ($r = -.22, p < .028$), and crisis domain ($r = -.21, p < .037$), indicating modest yet significant decreases in number of problems reported in those areas by older participants. There were no significant correlations between participant age and total number of problems or types of problems reported in other domains.

Between-Groups Differences

Using analysis of variance (ANOVA), we examined differences in problems reported based on gender, ethnicity, family type, and school lunch status. The only significant gender difference was in number of problems reported in the parental domain ($t = -2.26, p < .026$), with girls reporting significantly more problems ($M = 4.33, SD = 4.08$) than boys ($M = 2.65, SD = 3.33$). Participants living in stepfamilies reported significantly more problems in the parental domain ($M = 5.41, SD = 4.28$) than participants living in intact nuclear families ($M = 2.44, SD = 3.13$), $F(3, 95) = 4.03, p = .011$. There were no significant differences by ethnicity or school lunch status in problems reported.

Relationships Between Personal Problems and Psychosocial Well-Being

Table 3 shows the correlations between problems reported overall and in each of the 12 domains and scores on the measures of self-esteem, hopelessness, and delinquent attitudes. Reporting more problems (i.e., total number) was associated with lower self-esteem, a greater sense of hopelessness, and a higher delinquent attitude score. Additionally, self-esteem was related significantly and negatively to number of problems reported in 10 of the 12 domains. There were significant positive correlations between hopelessness and number of problems reported in 10 of the 12 problem domains. Health and money problems were not significantly related to self-esteem or hopelessness. Finally, problems in attitude, money, religion, dating/sex, and health domains were significantly and positively associated with delinquent attitude score.

Table 3.
Correlations Between Problem Domains and Self-Esteem, Hopelessness, and Delinquent Attitude Scores

Domain	Self-Esteem	Hopelessness	Delinquent Attitudes
Social	-.29**	.28**	-.17

Appearance	-.37**	.36**	.19
Attitude	-.36**	.34**	.24*
Parents	-.21*	.33**	.12
Family	-.28**	.44**	.20
School	-.31**	.28**	.12
Money	-.13	.14	.22*
Religion	-.26*	.37**	.29**
Emotions	-.26**	.24*	.12
Dating/Sex	-.20*	.32**	.21*
Health	-.13	.17	.35**
Crises	-.39**	.33**	.12
Total Problems	-.34**	.38**	.31**
** $p < 0.01$, * $p < 0.05$			

Three stepwise regression analyses were conducted to identify which of the 12 domains were the best predictors of self-esteem, hopelessness, and delinquent attitudes. For self-esteem, only problems in attitude and crisis domains were significant predictors, together accounting for 21% of the variance, with problems in both domains predicting lower self-esteem scores. Problems in family and religion domains predicted higher hopelessness scores, accounting for 23% of the variance. Finally, problems in social, attitude, and health domains predicted delinquent attitudes ($R^2 = .23$). While problems in attitude and health domains were predictive of higher delinquent attitude scores, number of problems in the social domain was associated with lower delinquent attitude scores.

Simple linear regression analyses showed that total number of problems reported was a significant predictor of all three indicators of psychosocial well-being, accounting for 12% of the variance in self-esteem, 15% of the variance in hopelessness, and 10% of the variance in delinquent attitude score, with total number of problems reported predicting lower self-esteem and higher hopelessness and delinquent attitude.

Discussion

The study reported here makes a much-needed contribution to the research literature on adolescence by providing information on the everyday problems reported by rural youth, a historically understudied group of adolescents. The results also provide confirmation that stress in the form of routinely experienced problems can detract from adolescent well-being.

Consistent with previous research (e.g., Burke & Weir, 1978; Zimmer-Gembeck & Skinner, 2008), the most commonly reported problems by adolescents in the study were in the social, parental, and

family domains. In other words, the problems most frequently reported had to do with other people, a finding not surprising given that adolescence is a time of major (and potentially challenging and stressful) social transitions, including a variety of related normative developments, such as moving from elementary to middle to high school, individuation, striving for greater autonomy and independence, and increased orientation toward peers (American Psychological Association, 2002; Byrne & Mazanov, 2002; National Research Council, 2002; Zimmer-Gembeck & Skinner, 2008).

Problems in the crisis, parental, and dating domains were found to decrease with age. This is understandable given that, relative to mid- to later adolescence, early adolescence is a generally more tumultuous period, characterized by more changes, especially those associated with the transition to middle school. In general, research indicates that the tendency is for things to settle down over the course of adolescence (National Research Council, 2002).

Only one significant gender difference was found: girls reported more problems than boys in the parental domain. This may be related to the fact that girls may experience higher levels of direct parental control, are granted less independence, and are expected to stay closer to home (Vermeersch, T'Sjoen, Kaufman, & Vincke, 2008). It is possible that girls perceive this enhanced degree of parental oversight as constricting or stifling, with this being reflected in the higher mean number of problems in the parental domain reported by girls in this study.

In terms of differences between youths living in various family structures, participants in stepfamilies reported more problems in the parental domain than participants in intact nuclear families. This is not entirely unexpected, as previous research has found that youth living with two biological parents experience better emotional well-being than those in other family structures (Amato, 2005; Langton & Berger, 2011; Sweeney, 2007). As Ganong and Coleman (2004) noted, "In virtually every area of assessment, stepchildren are found to fare more poorly, on average, than children living with both of their parents" (p. 146), although the differences are small, with meta-analyses finding effect sizes that range from $-.07$ to $-.46$.

The results of correlational and regression analyses suggest that the experience of stress-inducing problems is antithetical to well-being. Even commonly experienced problems can have the effect of lowering self-esteem while increasing hopelessness and delinquent attitudes. This is in line with research cited previously in this article indicating a relationship between "ordinary" stress and increased risk of poor adjustment or maladjustment (Self-Brown et al., 2004; Sim, 2000). Finally, the fact that total number of problems reported was correlated with and predictive of self-esteem, hopelessness, and delinquent attitudes supports the idea that a build-up or pile-up of stressors undermines well-being.

Perhaps the major limitation of the study had to do with the nature of the Personal Problems Checklist for Adolescence. The instrument only asks participants to indicate which problems they are currently experiencing. Therefore, there is no way of knowing whether the problems reported in the study were chronic or transitory. Likewise, problem severity was not determined. While the Personal Problems Checklist for Adolescents does instruct individuals to circle the problems they feel are worst or that are causing them the most trouble, most of the study's participants did not use that option.

Implications

Because stress constitutes a serious threat to adolescent health (Byrne & Mazanov, 2002), the question becomes, what (if anything) can Extension do to mitigate these problems and their effects?

Although the most common problems reported by the study's participants might seem relatively minor in nature to adult readers, they nonetheless constitute very real sources of stress for the adolescent. Developmental differences in coping exist (Skinner & Zimmer-Gembeck, 2007), in which early adolescents may not have the same skills as adults for coping with stressors. At a minimum, Extension and 4-H staff and volunteers should know how to appropriately respond when they are approached by an adolescent facing a stressful, or even crisis, situation. Russell (2001) provided suggestions for ways Extension volunteers can communicate their support: a) protect the youth if he/she is in immediate danger, b) work with the youth to plan how to talk to his/her parents about the issue, c) support the youth until he/she is able to discuss it with parents, and d) in the interest of safety and health, tell the parents if the youth does not follow through with the plan.

Extension can also use its traditional programming to help adolescents experiencing stress and poor psychosocial well-being. Depressed mood has been shown to be more strongly and positively related to stress for rural youth than for urban youth (Van Gundy, Stracuzzi, Rebellon, Tucker, & Cohn, 2011). Additionally, community attachment is related to a less depressed mood among rural youth (Van Gundy et al., 2011). A study by Adedokun and Balschweid (2009) found that rural 4-H members, compared to non-4-H members, reported higher levels of social connection to people in their communities and said they found it easy to approach others in their communities for advice when needed. Given this potential protective effect of community attachment, youth programs offered through Extension and 4-H that promote civic engagement or other types of community connections can help strengthen attachment to community and thus ease the impact of stress on rural youth.

Finally, Extension can implement prevention and intervention programs specific to stress, coping, and psychosocial well-being within or outside school settings or partner with other organizations to do so. As suggested by Self-Brown et al. (2004), the centerpiece of any program or plan for dealing with adolescent stressors should focus on building coping and problem-solving skills to improve the ability of rural youth to manage stressors more effectively. The efficacy of such an approach has been documented by Frauenknecht, Black, and Coster (1996), who found that as social problem-solving scores increased, distress and personal problems decreased. By helping adolescents learn to prevent stress and manage stress where it cannot be prevented, we can decrease the potential for negative stress-related outcomes. Also, many of the study's respondents reported problems in different types of relationships (e.g., with parents, peers, siblings), demonstrating a need for interventions to help rural adolescents understand and navigate various types of relationships, as well as the issues and challenges that arise in relationships. Programs that promote youth leadership skills or include peer mentoring and youth-adult partnerships can also enhance relationship skills. These characteristics are common in 4-H programs.

The study reported here focused on the types of problems or stressors most frequently experienced by rural youth. The strong presence of Extension and 4-H in some rural communities (approximately 46% of youth participating in 4-H reside in rural-type settings) and the related connections between

youth and adult staff and volunteers puts these organizations in a good position to work with adolescents in ways described above to reduce stress and enhance psychosocial well-being.

References

- Adedokun, O. A., & Balschweid, M. A. (2009). Are rural 4-Hers more connected to their communities than their non-4-H counterparts? *Journal of Extension* [On-line], 47(1) Article 1FEA6. Available at: <http://www.joe.org/joe/2009february/a6.php>
- Amato, P. R. (2005). The impact of family formation change on the cognitive, social, and emotional well-being of the next generation. *The Future Of Children*, 15(2), 75-96. doi:10.1353/foc.2005.0012.
- American Psychological Association. (2002). *Developing adolescents: A reference for professionals*. Retrieved from: <http://www.apa.org/pi/families/resources/develop.pdf>
- Bennett, M. D., & Miller, D. B. (2006). An exploratory study of the Urban Hassles Index: A contextually relevant measure of chronic multidimensional urban stressors. *Research on Social Work Practice*, 16, 305-314.
- Branan, S., & Rohs, F. R. (1991). Home economists identify research needs. *Journal of Extension* [On-line], 29(2) Article 2RIB3. Available at: <http://www.joe.org/joe/1991summer/rb3.php>
- Burke, R. J., & Weir, T. (1978). Sex differences in adolescent life stress, social support, and well-being. *Journal of Psychology*, 98, 277-288.
- Byrne, D. G., & Mazanov, J. (2002). Sources of stress in Australian adolescents: Factor structure and stability over time. *Stress and Health*, 18, 185-192.
- Crosby, E., Freed, S., & Gabriel, E. (2006). Personal problems of Seventh-day Adventist academy students. *Journal of Research on Christian Education*, 15, 77-93.
- Dunn, M. S., Ilapogu, V., Taylor, L., Naney, C., Blackwell, R., Wilder, R., & Givens, C. (2008). Self-reported substance use and sexual behaviors among adolescents in a rural state. *Journal of School Health*, 78, 587-593.
- Elgar, F. J., Arlett, C., & Groves, R. (2003). Stress, coping, and behavioural problems among rural and urban adolescents. *Journal of Adolescence*, 26, 574-585.
- Evans, G. W., Vermeylen, F. M., Barash, A., Lefkowitz, E. G., & Hutt, R. L. (2009). The experience of stressors and hassles among rural adolescents from low- and middle-income households in the USA. *Children, Youth, and Environments*, 19, 164-175.
- Frauenknecht, M., Black, D., & Coster, D. C. (1996). Adolescent problem solving, stress, and the Stepped Approach Model (SAM). *American Journal of Health*, 20(2), 30-41.
- Ganong, L. H., & Coleman, M. (2004). *Stepfamily relationships: Development, dynamics, and interventions*. New York: Kluwer Academic.
- Guthrie, B. J., Young, A. M., Boyd, C. J., & Kintner, E. K. (2002). Ebb and flow when navigating

adolescence: Predictors of daily hassles among African-American adolescent girls. *Journal for Specialists in Pediatric Nursing*, 7, 143-152.

Kazdin, A., French, N., Unis, A., Esveldt-Dawson, K., & Sherick, R. (1983). Hopelessness, depression, and suicidal intent among psychiatrically disturbed children. *Journal of Consulting and Clinical Psychology*, 51, 504-510.

Langton, C. E., & Berger, L. M. (2011). Family Structure and Adolescent Physical Health, Behavior, and Emotional Well-Being. *Social Service Review*, 85(3), 323-357.

National Research Council. (2002). *Community programs to promote youth development*. Washington, DC: The National Academies Press.

Phillips, T., & Pittman, J. (2007). Adolescent psychological well-being by identity style: A between-groups analysis. *Journal of Adolescence*, 30, 1021-1034.

Rosenberg, M. (1979). *Conceiving the self*. New York: Basic Books.

Russell, S. T. (2001). The role of the adult volunteer when youth turn to them in crisis. *Journal of Extension* [On-line], 39(5) Article 5IAW3. Available at: <http://www.joe.org/joe/2001october/iw3.php>

Schinka, J. A. (1985). *Personal problems checklist for adolescents*. Odessa, FL: Psychological Assessment Resources, Inc.

Self-Brown, S., LeBlanc, M., & Kelley, M. L. (2004). Effects of violence exposure and daily stressors on psychological outcomes in urban adolescents. *Journal of Traumatic Stress*, 17, 519-527.

Sim, H. (2000). Relationship of daily hassles and social support to depression and antisocial behavior among early adolescents. *Journal of Youth and Adolescence*, 29, 647-659.

Skinner, E. A., & Zimmer-Gembeck, M. J. (2007). The development of coping. *Annual Review of Psychology*, 58, 119-144.

Sweeney, M. M. (2007). Stepfather families and the emotional well-being of adolescents. *Journal of Health and Social Behavior*, 48, 33-49.

Tessner, K. D., Mittal, V., & Walker, E. F. (2011). Longitudinal study of stressful life events and daily stressors among adolescents at high risk for psychotic disorders. *Schizophrenia Bulletin*, 37, 432-441.

Van Gundy, K. T., Stracuzzi, N. F., Rebellon, C. J., Tucker, C. J., & Cohn, E. S. (2011). Perceived community cohesion and the stress process in youth. *Rural Sociology*, 76, 293-318.

Vermeersch, H., T'Sjoen, G., Kaufman, J. M., & Vincke, J. (2008). Gender, parental control, and adolescent risk-taking. *Deviant Behavior*, 29, 690-725.

Widmer, E. D., & Weiss, C. C. (2000). Do older siblings make a difference? The effects of older sibling support and older sibling adjustment on the adjustment of socially disadvantaged adolescents. *Journal of Research on Adolescence*, 10, 1-27.

Youngs, G. A., & Rathge, R. (1990). Adolescent stress and self-esteem. *Adolescence*, 25, 333-341.

Zimmer-Gembeck, M. J., & Skinner, E. A. (2008). Adolescents' coping with stress: Development and diversity. *Prevention Researcher*, 15, 3-7.

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