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CLERGY & RELIGION RESEARCH COLLABORATIVE

Journal Articles and Books

Contact:

Rae Jean Proeschold-Bell, PhD

Director, Duke Clergy Health Initiative

Professor, Duke Global Health Institute

and Duke Center for Health Policy & Inequalities Research

Duke University | Box 90392 | Durham, NC 27708 | 919.613.5442

Rae.Jean@duke.edu

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9. Proeschold-Bell, R.J., LeGrand, S., Wallace, A., James, J., Moore, H., Swift, R., & Toole, D. (2012). **Tailoring health programming to clergy: Findings from a study of United Methodist clergy in North Carolina.** *Journal of Prevention & Intervention in the Community*, 40(3), 246-261. <https://doi.org/10.1080/10852352.2012.680423> 11

10. LeGrand, S., Proeschold-Bell, R.J., James, J., & Wallace, A. (2013). **Healthy leaders: Multilevel health promotion considerations for diverse United Methodist Church pastors.** *Journal of Community Psychology*, 41(3), 303-321. <https://doi.org/10.1002/jcop.21539> 11

11. Miles, A., & Proeschold-Bell, R.J. (2013). **Overcoming the challenges of pastoral work?: Peer support groups and mental distress among United Methodist Church clergy.** *Sociology of Religion: A Quarterly Review*, 74(2). <https://doi.org/10.1093/socrel/srs055> 12

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13. Proeschold-Bell, R.J., Miles, A., Toth, M. Adams, C, Smith, B., & Toole, D. (2013). **Using effort-reward imbalance theory to understand high rates of depression and anxiety among clergy.** *Journal of Primary Prevention*, 34(6), 439-453. <https://doi.org/10.1007/s10935-013-0321-4> 13

14. Proeschold-Bell, R.J., Yang, C., Toth, M., Rivers, M., & Carder, K. (2014). **Closeness to God among those doing God’s work: A spiritual well-being measure for clergy.** *Journal of Religion and Health*, 53(3), 878-894. <https://doi.org/10.1007/s10943-013-9682-5> 13

15. Georggi Walther, N., Proeschold-Bell, R. J., Benjamin Neelon, S.E., Adipo, S., & Kamaara, E. (2015). **“We hide under the Scriptures”: Conceptualization of health among United Methodist Church clergy in Kenya.** *Journal of Religion and Health*, 54(6), 2235-2248, <https://doi.org/10.1007/s10943-014-9947-7>. 14

16. Eagle, D.E., & Proeschold-Bell, R.J. (2015). **Methodological considerations in the use of name generators and interpreters.** *Social Networks*, 40(2015), 75-83. <https://doi.org/10.1016/j.socnet.2014.07.005> 14

17. Blouin, R., & Proeschold-Bell, R.J. (2015). **Measuring stress in a clergy population: Lessons learned from cognitive interview testing of the Perceived Stress Scale with clergy.** *Research in the Social Scientific Study of Religion*, 26, 141-154. https://doi.org/10.1163/9789004299436_010 14

18. Proeschold-Bell, R.J., Smith, B., Eisenberg, A., LeGrand, S., Adams, C., & Wilk, A. (2015). **The glory of God is a human being fully alive: Predictors of positive versus negative mental health among clergy.** *Journal for the Scientific Study of Religion*, 54(4), 702-721. <https://doi.org/10.1111/jssr.12234> 15

19. Adams, C., Hough, H., Proeschold-Bell, R.J., Yao, J., & Kolkin, M. (2017). **Clergy burnout: A comparison study with other helping professions.** *Pastoral Psychology*, 66(2), 147-175. <https://doi.org/10.1007/s11089-016-0722-4>..... 15

20. Eagle, D., Miles, A., & Proeschold-Bell, R.J. (2017). **The honeymoon is over: Occupational relocation and changes in mental health among United Methodist clergy.** *Review of Religious Research*, 59 (1), 31-45, <https://doi.org/10.1007/s13644-016-0263-4> 16

21. Smith, T.W., Eagle, D.E., & Proeschold-Bell, R.J. (2017). **Prospective associations between depressive symptoms and the metabolic syndrome: The Spirited Life study of United Methodist pastors.** *Annals of Behavioral Medicine: A Publication of the Society of Behavioral Medicine*, 51(4), 610-619. <https://doi.org/10.1007/s12160-017-9883-3>..... 16

22. Proeschold-Bell, R.J., Turner, E. L., Bennett, G. G., Yao, J., Li, X.-F., Eagle, D. E., Meyer, R. A., Williams, R. B., Swift, R. Y., Moore, H. E., Kolkin, M. A., Weisner, C. C., Rugani, K. M., Hough, H. J., Williams, V. P., & Toole, D. C. (2017). **A 2-year holistic health and stress intervention: Results of an RCT in clergy.** *American Journal of Preventive Medicine*, 53(3), 290-299. <https://doi.org/10.1016/j.ampere.2017.04.009>
17

23. Case, A.D., Eagle, D.E., Yao, J., & Proeschold-Bell, R.J. (2018). **Disentangling race and socioeconomic status in health disparities research: An examination of black and white clergy.** *Journal of Racial and Ethnic Health Disparities*, 5(5), 1014-1022. <https://doi.org/10.1007/s40615-017-0449-7>..... 18

24. Hybels, C., Blazer, D.G., & Proeschold-Bell, R.J. (2018). **Persistent depressive symptoms in a population with high levels of occupational stress: Trajectories offer insights to both chronicity and resilience.** *Journal of Psychiatric Practice*, 24(6), 399-409. <https://doi.org/10.1097/PRA.0000000000000337> 18

25. Eagle, D., Hybels, C., & Proeschold-Bell, R.J. (2018). **Perceived social support, received social support, and depression among clergy.** *Journal of Social and Personal Relationships*, 36(7) 2055-2073. <https://doi.org/10.1177/0265407518776134> 19

26. Proeschold-Bell, R.J., Steinberg, D., Yao, J., Eagle, D.E., Smith, T.W., Cai, G., & Turner, E.L. (2018). **Using a holistic health approach to achieve long-term weight maintenance: Results from the Spirited**

- Life intervention.** *Translational Behavioral Medicine*, 10(1) 223-233.
<https://doi.org/10.1093/tbm/iby117> 19
27. Hough, H., Proeschold-Bell, R.J., Liu, X., Weisner, C., Turner, E.L., & Yao, J. (2019). **Relationships between Sabbath observance and mental, physical, and spiritual health in clergy.** *Pastoral Psychology*, 68(2), 171-193. <https://doi.org/10.1007/s11089-018-0838-9> 20
28. Case, A., Proeschold-Bell, R.J., Keyes, C., Huffman, K., Sittser, K., Wallace, A., Khatiwoda, P., & Parnell, H. (2019). **Attitudes and behaviors that differentiate clergy with positive mental health from those with burnout.** *Journal of Prevention & Intervention in the Community*, 48(1), 94-112.
<https://doi.org/10.1080/10852352.2019.1617525> 21
29. Milstein, G., Hybels, C., & Proeschold-Bell, R.J. (2019). **A prospective study of clergy spiritual well-being, depressive symptoms, and occupational distress.** *Psychology of Religion and Spirituality*, 12(4), 409-416. <http://dx.doi.org/10.1037/rel0000252> 21
30. Lutz, J., & Eagle, D. E. (2019). **Social networks, support, and depressive symptoms: Gender differences among clergy.** *Socius*, 5, <https://doi.org/10.1177/2378023119873821> 22
31. Hybels, C. F., Blazer, D. G., Eagle, D. E., & Proeschold-Bell, R.J. (2020). **Age differences in trajectories of depressive, anxiety, and burnout symptoms in a population with a high likelihood of persistent occupational distress.** *International Psychogeriatrics*, 34(1), 21-32. Copyright © 2020 Cambridge University Press. <https://doi.org/10.1017/S1041610220001751> 22
32. Keyes, C., Yao, J., Hybels, C. F., Milstein, G., & Proeschold-Bell, R. J. (2020). **Are changes in positive mental health associated with increased likelihood of depression over a two-year period? A test of the mental health promotion and protection hypotheses.** *Journal of Affective Disorders*, 270, 136–142. Copyright © 2020 Elsevier B.V. <https://doi.org/10.1016/j.jad.2020.03.056> 23
33. Hamm, A. K., & Eagle, D. E. (2021). **Clergy who leave congregational ministry: A review of the literature.** *Journal of Psychology and Theology*, 49(4), 291-307.
<https://doi.org/10.1177/00916471211011597> 23
34. Johnston, E. F., Eagle, D. E., Headley, J., & Holleman, A. (2021). **Pastoral ministry in unsettled times: A qualitative study of the experiences of clergy during the COVID-19 pandemic.** *Review of Religious Research*, 1–23. Advance online publication. Copyright © 2021 Springer Nature.
<https://doi.org/10.1007/s13644-021-00465-y> 24
35. David E. Eagle, Erin F. Johnston, Jennifer Headley, and Anna Holleman. (2021). **The financial impacts of COVID-19 on United Methodist Churches in North Carolina: A qualitative study of pastors' perspectives and strategies.** *Review of Religious Research* 64(2), 399-420.
<https://doi.org/10.1007/s13644-021-00474-x> 25

36. Proeschold-Bell, R. J., Stringfield, B., Yao, J., Choi, J., Eagle, D., Hybels, C., Parnell, H., Keefe, K., & Shilling, S. (2021). **Changes in Sabbath-keeping and mental health over time: Evaluation findings from the Sabbath Living study.** *Journal of Psychology and Theology* 50(2), 123-138.
https://doi.org/10.1177/009164712111046227 25
37. Eagle, D.E., & Mueller, C.W. (2022). **Reproducing inequality in a formally anti-racist organization: The case of racialized career pathways in the United Methodist Church.** *American Journal of Sociology*, 127(5), 1507-1550. https://doi.org/10.1086/719391 26
38. Biru, B., Yao, J., Plunkett, J., Hybels, C.F., Kim, E. T., Eagle, D. E., Choi, J., & Proeschold-Bell, R.J. (2022). **The gap in mental health service utilization among United Methodist clergy with anxiety and depressive symptoms.** *Journal of Religion and Health*, 62(3), 1597-1615.
https://doi.org/10.1007/s10943-022-01699-y 26
39. Holleman, Anna. (2022). **The resilience of clergywomen?: Gender and the relationship between occupational distress and mental health among congregational leaders.** *Journal for the Scientific Study of Religion*, 62(1), 89-107. https://doi.org/10.1111/jssr.12817 27
40. Johnston, Erin F., David E. Eagle, Brian Perry, Amy Cornelli, and Rae Jean Proeschold-Bell. (2022). **Seminary students and physical health: Beliefs, intentions, and behaviors.** *Journal of Religion and Health*, 61(2), 1207-1225. https://doi.org/10.1007/s10943-021-01480-7 27
41. Johnston, Erin F. and David E. Eagle. (2022). **Expanding the horizontal call: A typology of social influences on the call to ministry.** *Journal for the Scientific Study of Religion*, 62(1), 68-88. https://doi-org.proxy.lib.duke.edu/10.1111/jssr.12816 28
42. Ferguson, Todd W. and Josh Packard. (2022). **Stuck: Why clergy are alienated from their calling, congregation, and career...And what to do about it.** Minneapolis, MN: Fortress Press 28
43. Proeschold-Bell, R.J., Eagle, D.E., Tice, L.C. *et al.* (2023). **The Selah pilot study of spiritual, mindfulness, and stress inoculation practices on stress-related outcomes among United Methodist Clergy in the United States.** *J Relig Health*. https://doi.org/10.1007/s10943-023-01848-x 29
45. Johnston, Erin F., Jennifer Headley, and David E. Eagle. (2023). **Pastoring in a pandemic: supports used and desired by United Methodist clergy in the early period of the COVID-19 pandemic.** *Journal of Psychology and Theology*. https://doi.org/10.1177/00916471231182737 30
46. Tice, L. C., Eagle, D. E., Rash, J. A., Larkins, J. S., Labrecque, S. M., Platt, A., Yao, J., & Proeschold-Bell, R. J. (2021). **Rationale and preferences trial design to test three approaches to reduce stress symptoms among clergy.** *Trials*, 22, 892. https://doi.org/10.1186/s13063-021-05845-x 30

47. Yao J., Steinberg D., Turner L., Cai, G., Cameron J., Hybels C., Eagle D., Milstein G., Rash J., & Proeschold-Bell, R.J. (2023). **When shepherds shed: Trajectories of weight, diet and exercise in a holistic health intervention tailored for US Christian clergy.** *Journal of Religion and Health*. <https://doi.org/10.1007/s10943-023-01910-8>..... 30
48. Holleman, A. & Eagle, D. (2023). **Is there a crisis in clergy health?: Reorienting research using a national sample.** *Journal for the Scientific Study of Religion*. <https://doi.org/10.1111/jssr.12859>..... 31
49. Upenieks, L. & Eagle, D. (2023). **Divine struggles among those doing God's work: A longitudinal assessment predicting depression and burnout and the role of social support in United Methodist Clergy.** *Sociology of Religion*, 1-29. <https://doi.org/10.1093/socrel/srad014> 31
50. Gaghan, J. & Eagle, D. (2023). **Are women elders paid less than men? A brief report from the North Carolina Statewide Longitudinal Survey of United Methodist Clergy.** *Review of Religious Research*, 64(4), 1005-1006. <https://doi.org/10.1007/s13644-022-00522-0> 32
51. Upenieks, L. (2023). Spiritually well, mentally well? Examining the early life of religious antecedents of the impact of spiritual well-being on mental health among United Methodist clergy in North Carolina. *Journal of Religion and Health*. <https://doi.org/10.1007/s10943-023-01822-7> 32
52. Johnston, E., Holleman, A., & Krull, L. (2023). **There's theology and then there's the people I love...: Authority and ambivalence in seminarians' attitudes toward same-sex relationships, marriage, and ordination.** *Sociology of Religion*. <https://doi.org/10.1093/socrel/srad040> 33
53. Holleman, A., Upenieks, L., & Eagle, D. (2023). **Adverse childhood experiences among seminarians: Personal experiences of trauma and implications for pastoral well-being and ministerial training.** *Journal of Psychology and Theology*, 52(1):3-17. <https://doi.org/10.1177/00916471231206361> 33
54. Proeschold-Bell, R. J., Eagle, D. E., Tice, L. C., Yao, J., Rash, J. A., Choi, J. Y., Stringfield, B., & Labrecque, S. M. (2023). **The Selah pilot study of spiritual, mindfulness, and stress inoculation practices on stress-related outcomes among United Methodist clergy in the United States.** *Journal of Religion and Health*, 62(4), 2686–2710. <https://doi.org/10.1007/s10943-023-01848-x> 34
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56. Proeschold-Bell, R. J., Eagle, D., Tice, L., Platt, A., Yao, J., Larkins, J. S., Kim, E. T., & Rash, J. A. (2024). **The Selah trial: A preference-based partially randomized waitlist control study of three stress management interventions.** *Translational Behavioral Medicine*. <https://doi.org/10.1093/tbm/ibae01735>

57. Eagle, D., Holleman, A., Olvera, B., & Blackwood, E. (2024). **Prevalence of obesity in religious clergy in the United States: A systematic review and meta-Analysis.** *Obesity Reviews* e13741. <https://doi.org/10.1111/obr.13741>..... 36
58. Lee, B. H. J., Yao, J., Ramcharitar-Bourne, A., & Proeschold-Bell, R. J. (2024). **High rates of obesity and chronic diseases among North Carolina United Methodist clergy: An updated analysis.** *North Carolina Medical Journal*, 85(6), 446. <https://doi.org/10.18043/001c.125104> 36
59. Sohail, M. M., Yao, J., Jane Lee, B. H., Salgado, G. N., & Proeschold-Bell, R. J. (2025). **The relationship between burnout and Outlook, resilience, and other emotional styles: Evidence from United Methodist clergy.** *Journal of Workplace Behavioral Health*, 1-21. <https://doi.org/10.1080/15555240.2025.2459276> 37
60. Rash, J. A., Eagle, D. E., Tice, L. C., & Proeschold-Bell, R. J. (2025). **An exploration of the mediators and moderators of mindfulness-based stress reduction among clergy: Secondary analysis of data from the Selah trial, a preference-based randomized wait-list-controlled trial.** *International Journal of Stress Management*. <https://dx.doi.org/10.1037/str0000354> 37
61. Ferguson, T. W., Milstein, G., & Yao, J. (2025). **Does Religious Switching Predict Clergy Longitudinal Spiritual Well-being?** *Review of Religious Research*. <https://doi.org/10.1177/0034673X251330502> 38

Book:

Proeschold-Bell, R.J. & Byassee, J. (May 2018). *Faithful and fractured: Responding to the clergy health crisis*. Grand Rapids, MI: Baker Academic.

Abstracts:

1. Proeschold-Bell, R.J., & LeGrand, S. (2010). **High rates of obesity and chronic disease among United Methodist clergy.** *Obesity*, 18(9), 1867-1870.
<https://doi.org/10.1038/oby.2010.102>

We used self-reported data from United Methodist clergy to assess the prevalence of obesity and having ever been told certain chronic disease diagnoses. Of all actively serving United Methodist clergy in North Carolina (NC) 95% (n = 1726) completed self-report height and weight items and diagnosis questions from the Behavioral Risk Factor Surveillance Survey (BRFSS). We calculated BMI categories and diagnosis prevalence rates for the clergy and compared them to the NC population using BRFSS data. The obesity rate among clergy aged 35–64 years was 39.7%, 10.3% (95% CI = 8.5%, 12.1%) higher than their NC counterparts. Clergy also reported significantly higher rates of having ever been given diagnoses of diabetes, arthritis, high blood pressure, angina, and asthma compared to their NC peers. Health interventions that address obesity and chronic disease among clergy are urgently needed.

2. Proeschold-Bell, R.J., LeGrand, S., James, J., Wallace, A., Adams, C., & Toole, D. (2011). **A theoretical model of the holistic health of United Methodist clergy.** *Journal of Religion and Health*, 50(3), 700-720. <https://doi.org/10.1007/s10943-009-9250-1>

Culturally competent health interventions require an understanding of the population's beliefs and the pressures they experience. Research to date on the health-related beliefs and experiences of clergy lacks a comprehensive data-driven model of clergy health. Eleven focus groups with 59 United Methodist Church (UMC) pastors and 29 UMC District Superintendents were conducted in 2008. Participants discussed their conceptualization of health and barriers to, and facilitators of, health promotion. Audiotape transcriptions were coded by two people each and analyzed using grounded theory methodology. A model of health for UMC clergy is proposed that categorizes 42 moderators of health into each of five levels drawn from the Socioecological Framework: Intrapersonal, Interpersonal, Congregational, United Methodist Institutional, and Civic Community. Clergy health is mediated by stress and self-care and coping practices. Implications for future research and clergy health interventions are discussed.

3. Miles, A., Proeschold-Bell, R.J., Puffer, E. (2011). **Explaining rural/non-rural disparities in physical health-related quality of life: A study of United Methodist clergy in North Carolina.** *Quality of Life Research*, 20(6), 807-815. <https://doi.org/10.1007/s11136-010-9817-z>

Purpose Researchers have documented lower health related quality of life (HRQL) in rural areas. This study seeks to identify factors that can explain this disparity. Methods United Methodist clergy in North Carolina (N = 1,513) completed the SF-12 measure of HRQL and items on chronic disease diagnoses, health behaviors, and health care access from the Behavioral Risk Factor Surveillance Survey (BRFSS). Differences in HRQL between rural (N = 571) and non-rural

clergy (N = 942) were examined using multiple regression analyses. Results Physical HRQL was significantly lower for rural clergy (-2.0; 95% CI: -2.9 to -1.1; P\0.001). Income, body mass index, and joint disease partially accounted for the rural/non-rural difference, though a sizable disparity remained after controlling for these mediators (-1.02; 95% CI: -1.89 to -.15; P = 0.022). Mental HRQL did not differ significantly between rural and non-rural respondents (1.0, 95% CI: -0.1 to 2.1; P = 0.067). Conclusions Rural/non-rural disparities in physical HRQL are partially explained by differences in income, obesity, and joint disease in rural areas. More research into the causes and prevention of these factors is needed. Researchers also should seek to identify variables that can explain the difference that remains after accounting for these variables.

4. Proeschold-Bell, R.J. & LeGrand, S. (2012). **Physical health functioning among United Methodist clergy.** *Journal of Religion and Health*, 51(3), 734-742.
<https://doi.org/10.1007/s10943-010-9372-5>

United Methodist clergy have been found to have higher than average self-reported rates of obesity, diabetes, asthma, arthritis, and high blood pressure. However, health diagnoses differ from physical health functioning, which indicates how much health problems interfere with activities of daily living. Ninety-five percent (n = 1726) of all actively serving United Methodist clergy in North Carolina completed the SF-12, a measure of physical health functioning that has US norms based on self-administered survey data. Sixty-two percent (n = 1074) of our sample completed the SF-12 by self-administered formats. We used mean difference tests among self-administered clergy surveys to compare the clergy SF-12 Physical Composite Scores to US-normed scores. Clergy reported significantly better physical health composite scores than their gender- and age-matched peers, despite above average disease burden in the same sample. Although health interventions tailored to clergy that address chronic disease are urgently needed, it may be difficult to elicit participation given pastors' optimistic view of their physical health functioning.

5. Cutts, T.F., Gunderson, G., Proeschold-Bell, R. J., Swift, R. (2012). **The life of leaders: An intensive health program for clergy.** *Journal of Religion and Health*, 51(4), 1317-1324.
<https://doi.org/10.1007/s10943-010-9436-6>

Clergy suffer from chronic disease rates that are higher than those of nonclergy. Health interventions for clergy are needed, and some exist, although none to date have been described in the literature. Life of Leaders is a clergy health intervention designed with particular attention to the lifestyle and beliefs of United Methodist clergy, directed by Methodist LeBonheur Healthcare Center of Excellence in Faith and Health. It consists of a two-day retreat of a comprehensive executive physical and leadership development process. Its guiding principles include a focus on personal assets, multidisciplinary, integrated care, and an emphasis on the contexts of ministry for the poor and community leadership. Consistent with calls to intervene on clergy health across multiple ecological levels, Life of Leaders intervenes at the individual and

interpersonal levels, with potential for congregational and religious denominational change. Persons wishing to improve the health of clergy may wish to implement Life of Leaders or borrow from its guiding principles.

6. Wallace, A., Proeschold-Bell, R.J., LeGrand, S., James, J., Swift, R, Toole, D., & Toth, M. (2012). **Health programming for clergy: An overview of Protestant programs.** *Pastoral Psychology*, 61, 113-143. <https://doi.org/10.1007/s11089-011-0382-3>

The health of clergy is important, and clergy may find health programming tailored to them more effective. Little is known about existing clergy health programs. We contacted Protestant denominational headquarters and searched academic databases and the Internet. We identified 56 clergy health programs and categorized them into prevention and personal enrichment; counseling; marriage and family enrichment; peer support; congregational health; congregational effectiveness; denominational enrichment; insurance/ strategic pension plans; and referral-based programs. Only 13 of the programs engaged in outcomes evaluation. Using the Socioecological Framework, we found that many programs support individual-level and institutional-level changes, but few programs support congregational-level changes. Outcome evaluation strategies and a central repository for information on clergy health programs are needed.

7. Miles, A., & Proeschold-Bell, R.J. (2012). **Are rural clergy worse off?: An examination of occupational conditions and pastoral experiences in a sample of United Methodist clergy.** *Sociology of Religion: A Quarterly Review*, 73(1), 23-45. <https://doi.org/10.1093/socrel/srr025>

Despite the fact that nearly one-third of churches in the United States are located in predominately rural areas, researchers have paid little attention to rural churches and the experiences of their clergy. What little empirical literature does exist typically examines rural churches without providing comparative data to churches in other locations. This study uses church records and a survey of 1,726 actively serving United Methodist Church (UMC) clergy in North Carolina to examine rural/non-rural differences. Analyses were restricted to clergy serving in churches (N = 1,505), and those with non-missing data for each outcome. Three unique ordination statuses exist within the UMC: elder, local pastor and pastors recalled from retirement (retired pastors). Churches were coded as rural based on clergy descriptions of the areas surrounding their primary congregations (e.g., "rural or open country"). Church size was measured as number of members.

8. Proeschold-Bell, R.J. & McDevitt, P.M. (2012). **An overview of the history and current status of clergy health.** *Journal of Prevention & Intervention in the Community*, 40(3), 177-179. <https://doi.org/10.1080/10852352.2012.680407>

At one time, clergy were thought to be some of the healthiest people in the world. Demographers Haitung King and John C. Bailar, III (1969) searched through four centuries worth of mortality data from nine European countries and the United States and concluded that clergy, up through 1959, lived longer than non-clergy. They also found that clergy lived longer than other white-collar professionals, at least until 1910 when physicians and lawyers began living nearly as long as clergy and teachers began living longer. However, a close look at the data reveals that, although clergy lived longer overall, some clergy died sooner from specific diseases that were either chronic (coronary disease, diabetes) or possibly stress-related (examples using the language of the time include “malfunctioning of the digestive system” and “psychoneurotic disorders”). What clergy have historically been good at is good behavior: fewer accidents, fewer suicides, and less syphilis (King & Bailar, 1969).

9. Proeschold-Bell, R.J., LeGrand, S., Wallace, A., James, J., Moore, H., Swift, R., & Toole, D. (2012). **Tailoring health programming to clergy: Findings from a study of United Methodist clergy in North Carolina.** *Journal of Prevention & Intervention in the Community*, 40(3), 246-261. <https://doi.org/10.1080/10852352.2012.680423>

Research indicating high rates of chronic disease among some clergy groups highlights the need for health programming for clergy. Like any group united by similar beliefs and norms, clergy may find culturally tailored health programming more accessible and effective. There is an absence of research on what aspects clergy find important for clergy health programs. We conducted 11 focus groups with United Methodist Church pastors and district superintendents. Participants answered open-ended questions about clergy health program desires and ranked program priorities from a list of 13 possible programs. Pastors prioritized health club memberships, retreats, personal trainers, mental health counseling, and spiritual direction. District superintendents prioritized for pastors: physical exams, peer support groups, health coaching, retreats, health club memberships, and mental health counseling. District superintendents prioritized for themselves: physical exams, personal trainers, health coaching, retreats, and nutritionists. Additionally, through qualitative analysis, nine themes emerged concerning health and health programs: (a) clergy defined health holistically, and they expressed a desire for (b) schedule flexibility, (c) accessibility in rural areas, (d) low cost programs, (e) institutional support, (f) education on physical health, and (g) the opportunity to work on their health in connection with others. They also expressed concern about (h) mental health stigma and spoke about (i) the tension between prioritizing healthy behaviors and fulfilling vocational responsibilities. The design of future clergy health programming should consider these themes and the priorities clergy identified for health programming.

10. LeGrand, S., Proeschold-Bell, R.J., James, J., & Wallace, A. (2013). **Healthy leaders: Multilevel health promotion considerations for diverse United Methodist Church pastors.** *Journal of Community Psychology*, 41(3), 303-321. <https://doi.org/10.1002/jcop.21539>

Community psychologists often work with institutions and leaders, such as clergy, to bring about social change. Studies finding high rates of chronic disease among clergy have called for the design of clergy health interventions. However, among clergy there is substantial diversity. We conducted four focus groups with a cross-section of United Methodist clergy and one focus group each with female, local, young, and large-sized church pastors. We compared themes from the specific versus broader focus groups. Findings are as follows: female pastors felt guilty for taking personal time and experienced pressure to prove themselves; local pastors reported financial strain and utilized a variety of interpersonal relationships; young pastors indicated child-related stress but also greater interest in nutrition, exercise, and church-based health promotion; and large-sized church pastors expressed increased confidence in negotiating personal time and reported more sharing of pastoral duties. We organized themes by levels of the socioecological framework to guide intervention design.

11. Miles, A., & Proeschold-Bell, R.J. (2013). **Overcoming the challenges of pastoral work?: Peer support groups and mental distress among United Methodist Church clergy.** *Sociology of Religion: A Quarterly Review*, 74(2). <https://doi.org/10.1093/socrel/srs055>

Clergy often face a great deal of occupational stress that in turn can lead to psychological distress. In recent years, denominations have been turning to peer support groups to combat these challenges, but little research exists regarding their effectiveness. This study explores the utility of peer support groups for reducing psychological distress among pastors by analyzing data from two waves of an ongoing study of United Methodist Church (UMC) clergy in North Carolina, as well as focus group data from the same population. Results indicate that participation in peer support groups had weakly beneficial direct and indirect relationships to psychological distress (measured as mentally unhealthy days, anxiety, and depression). Focus group data indicated that the weak results may be due to an interplay between varied group activities and differences in individual coping styles, which in turn lead to a mix of positive and negative group experiences. The results caution against assuming that peer groups are a uniformly effective solution to the occupational demands of pastoral work.

12. Proeschold-Bell, R.J., Swift, R., Bennett, G., Moore, H. E., Li, X., Blouin, R., Williams, V., Williams, R., & Toole, D. (2013). **Use of a randomized multiple baseline design: Rationale and design of the Spirited Life holistic health intervention study.** *Contemporary Clinical Trials*, 35(2), 138-152. <https://doi.org/10.1016/j.cct.2013.05.005>

Clergy suffer from high rates of obesity, chronic disease, and depression, and simultaneously underestimate the toll these take on their daily functioning. Health interventions are needed for clergy and may be tailored to their occupational context and theological beliefs. Few studies have sought to improve clergy health. No prior studies have utilized a randomized design. Spirited Life is a randomized, multiple baseline study that offered enrollment to nearly all United Methodist Church clergy in North Carolina in fall 2010. A total of 1114 clergy (response rate = 64%) enrolled. Using a multiple baseline design, we randomized participants to three cohorts.

Each cohort began the health intervention in one of three consecutive years. The third cohort served as a randomized waitlist control cohort, allowing comparisons between the first and third cohorts. The two-year Spirited Life intervention consists of: 1) a theological underpinning for health stewardship based on incarnation, grace, and response and delivered during workshops; 2) the stress management program Williams LifeSkills; 3) Naturally Slim, an online weight loss program; 4) phone contact with a Wellness Advocate; and 5) \$500 small grants for health goals. Metabolic syndrome is the primary endpoint. Stress and depressive severity are secondary endpoints. We measured each construct before, twice during, and at the end of the two-year intervention. Study outcomes, to be published after follow-up data are gathered, will provide evidence of the effectiveness of the combined intervention components of Spirited Life. If successful, the intervention may be considered for use with other clergy and faith populations.

13. Proeschold-Bell, R.J., Miles, A., Toth, M. Adams, C, Smith, B., & Toole, D. (2013). **Using effort-reward imbalance theory to understand high rates of depression and anxiety among clergy.** *Journal of Primary Prevention*, 34(6), 439-453. <https://doi.org/10.1007/s10935-013-0321-4>

The clergy occupation is unique in its combination of role strains and higher calling, putting clergy mental health at risk. We surveyed all United Methodist clergy in North Carolina, and 95 % (n = 1,726) responded, with 38% responding via phone interview. We compared clergy phone interview depression rates, assessed using the Patient Health Questionnaire (PHQ-9), to those of in-person interviews in a representative United States sample that also used the PHQ-9. The clergy depression prevalence was 8.7 %, significantly higher than the 5.5 % rate of the national sample. We used logistic regression to explain depression, and also anxiety, assessed using the Hospital Anxiety and Depression Scale. As hypothesized by effort-reward imbalance theory, several extrinsic demands (job stress, life unpredictability) and intrinsic demands (guilt about not doing enough work, doubting one's call to ministry) significantly predicted depression and anxiety, as did rewards such as ministry satisfaction and lack of financial stress. The high rate of clergy depression signals the need for preventive policies and programs for clergy. The extrinsic and intrinsic demands and rewards suggest specific actions to improve clergy mental health.

14. Proeschold-Bell, R.J., Yang, C., Toth, M., Rivers, M., & Carder, K. (2014). **Closeness to God among those doing God's work: A spiritual well-being measure for clergy.** *Journal of Religion and Health*, 53(3), 878-894. <https://doi.org/10.1007/s10943-013-9682-5>

Measuring spiritual well-being among clergy is particularly important given the high relevance of God to their lives, and yet its measurement is prone to problems such as ceiling effects and conflating religious behaviors with spiritual well-being. To create a measure of closeness to God for Christian clergy, we tested survey items at two time points with 1,513 United Methodist Church clergy. The confirmatory factor analysis indicated support for two, six-item factors: Presence and Power of God in Daily Life, and Presence and Power of God in Ministry. The data

supported the predictive and concurrent validity of the two factors and evidenced high reliabilities without ceiling effects. This Clergy Spiritual Well-being Scale may be useful to elucidate the relationship among dimensions of health and well-being in clergy populations.

15. Georggi Walther, N., Proeschold-Bell, R. J., Benjamin Neelon, S.E., Adipo, S., & Kamaara, E. (2015). **"We hide under the Scriptures": Conceptualization of health among United Methodist Church clergy in Kenya.** *Journal of Religion and Health*, 54(6), 2235-2248, <https://doi.org/10.1007/s10943-014-9947-7>

As community leaders, clergy are well-positioned to impact the health of their congregants. Clergy's conceptualizations of health influence their own self-care and how they minister to others. Interviews and focus group discussions on health conceptualizations and health-seeking behaviors were conducted with 49 United Methodist Church clergy in Western Kenya. Data were analyzed using interpretative phenomenological methods. Participants defined health holistically using an environmental health model. Some participants reported not seeking health care so their congregants would believe that their faith kept them healthy. Participants who believed that health comes directly from God reported seeking health care less often. Participants also reported combining traditional indigenous medicine with Western medicine. This study has implications for health promotion among Kenyan clergy and offers the first study of health conceptualization among clergy in Africa.

16. Eagle, D.E., & Proeschold-Bell, R.J. (2015). **Methodological considerations in the use of name generators and interpreters.** *Social Networks*, 40(2015), 75-83. <https://doi.org/0.1016/j.socnet.2014.07.005>

With data from the Clergy Health Initiative Longitudinal Survey, we look for interviewer effects, differences between web and telephone delivery, and panel conditioning bias in an "important matters" name generator and interpreter, replicated from the U.S. General Social Survey. We find evidence of phone interviewers systematically influencing the number of confidants named, we observe that respondents assigned to the web survey reported a larger number of confidants, and we uncover strong support for panel conditioning. We discuss the possible mechanisms behind these observations and conclude with a brief discussion of the implications of our findings for similar studies.

17. Blouin, R., & Proeschold-Bell, R.J. (2015). **Measuring stress in a clergy population: Lessons learned from cognitive interview testing of the Perceived Stress Scale with clergy.** *Research in the Social Scientific Study of Religion*, 26, 141-154. https://doi.org/10.1163/9789004299436_010

The most commonly used self-report stress measure is the ten-item Perceived Stress Scale (PSS), first published by Cohen in 1983. The PSS seeks to measure one's appraisal of stress, helplessness and self-efficacy. We determined how Christian clergy might respond to the PSS by conducting cognitive interview testing with a sample of twelve United Methodist pastors. Interviews were audiotaped and summarized, with content analysis conducted on the summaries. Data saturation was achieved. Participants reported strong negative reactions to PSS language like 'upset' and 'angered'. Although the PSS considers higher perceived control to be indicative of less stress, participants reported that they consider accepting lack of control as a sign of faith. Participants reported fears of being poorly regarded as religious leaders upon endorsing items like lack of ability to 'handle personal problems'. Participants indicated that their theological beliefs of seeking God's way and being faithful conflicted with items such as 'things are going your way' and 'you could not overcome'. When answered by Christian pastors, the majority of PSS items may be subject to under-reporting and response bias. Future research should identify valid stress measures for Christian clergy and assess the validity of the PSS in non-clergy Christian populations.

18. Proeschold-Bell, R.J., Smith, B., Eisenberg, A., LeGrand, S., Adams, C., & Wilk, A. (2015). **The glory of God is a human being fully alive: Predictors of positive versus negative mental health among clergy.** *Journal for the Scientific Study of Religion*, 54(4), 702-721.
<https://doi.org/10.1111/jssr.12234>

Full understanding of any individual requires understanding both their positive and negative affect as they relate to their work. We consider this balance among United Methodist clergy, who feel called to their vocation and perform multiple roles with diverse stressors. Data for this study come from the 2012 wave of the Duke Clergy Health Initiative Longitudinal survey, and include 1,476 church-appointed clergy. Stepwise multiple regression analysis was used to assess the variance in seven positive and negative affective outcomes explained by four sets of variables: social desirability, demographics, variables shown to relate to affect across populations, and clergy-specific variables. Social support, social isolation, and financial stress together explained between 8% and 34% of the variance in both positive and negative affect outcomes. The clergy-specific variables explained an additional 11%-16% of variance. Congregation demands and thoughts of leaving ministry were significantly related to both positive and negative affect. Spiritual well-being, positive congregations, congregation support of clergy, and confidence in supervisor consideration of future church appointments were significantly related to positive affect outcomes. These findings may be used to ameliorate negative affect and promote positive affect among clergy, and can be used as a guide to study affect in other caregiving populations.

19. Adams, C., Hough, H., Proeschold-Bell, R.J., Yao, J., & Kolkin, M. (2017). **Clergy burnout: A comparison study with other helping professions.** *Pastoral Psychology*, 66(2), 147-175.
<https://doi.org/10.1007/s11089-016-0722-4>

Clergy experience a large number of stressors in their work, including role overload and emotional labor. Although studies have found high rates of depression in clergy, the degree of work-related burnout in clergy compared to other occupations is unknown. The widely used Maslach Burnout Inventory (MBI) measures three aspects of burnout: emotional exhaustion, depersonalization, and personal accomplishment. We sought studies using comparable versions of the MBI for clergy; for social workers, counselors, and teachers because of those occupations' emotional intensity and labor; and for police and emergency personnel because of the unpredictability and stress-related physiological arousal in those occupations. We found a total of 84 studies and compared the ranges of burnout scores between the studies of clergy, each additional occupation, and MBI published mean norms. Compared to U.S. norms, clergy exhibited moderate rates of burnout. Across the three kinds of burnout, clergy scores were relatively better than those of police and emergency personnel, similar to those of social workers and teachers, and worse than those of counselors. Clergy may benefit from burnout prevention strategies used by counselors. The moderate levels of burnout found for clergy, despite the numerous stressors associated with their occupation, suggest that clergy generally cope well and may be models to study. Overall, there is room for improvement in burnout for all professions, especially police and emergency personnel. It is important to remember the variation within any profession, including clergy, and prevent and address burnout for those in need.

20. Eagle, D., Miles, A., & Proeschold-Bell, R.J. (2017). **The honeymoon is over: Occupational relocation and changes in mental health among United Methodist clergy.** *Review of Religious Research*, 59 (1), 31-45, <https://doi.org/10.1007/s13644-016-0263-4>

In this study we examine how the process of relocation affects the mental health of United Methodist clergy and the extent to which relocation is associated with changes in clergy perception of the workplace environment and feelings of self-efficacy. We analyzed data from a longitudinal survey of 1375 clergy, one quarter of whom experienced a move between the baseline survey in 2008 and the follow-up survey 2 years later. Contrary to expectations, we find that mental distress decreased for those who recently moved compared to those who had moved 2 years prior. We also find strong evidence of a "honeymoon effect." Recently relocated clergy report higher levels of self-efficacy and higher workplace morale compared to those who do not relocate. This study underscores the importance of examining the short and longer-term impact of moving on mental distress and presses scholars to consider the ways in which, under certain circumstances, relocation may improve mental health.

21. Smith, T.W., Eagle, D.E., & Proeschold-Bell, R.J. (2017). **Prospective associations between depressive symptoms and the metabolic syndrome: The Spirited Life study of United Methodist pastors.** *Annals of Behavioral Medicine: A Publication of the Society of Behavioral Medicine*, 51(4), 610-619. <https://doi.org/10.1007/s12160-017-9883-3>

Metabolic syndrome (Met-S) has a robust concurrent association with depression. A small, methodologically limited literature suggests that Met-S and depression are reciprocally related over time, an association that could contribute to their overlapping influences on morbidity and mortality in cardiovascular disease, diabetes, and cancer. Using a refined approach to the measurement of Met-S as a continuous latent variable comprising continuous components, this study tested the prospective associations between Met-S and depression. This study of 1114 clergy included four annual assessments of depressive symptoms and Met-S components. Standard methods were used to measure Met-S risk factors, and the Patient Health Questionnaire-8 was used to assess depressive symptoms. We used confirmatory factor analysis to verify the structure of Met-S and depression and structural equation modeling to quantify the prospective relationships. The statistical models confirmed the validity of quantifying Met-S as a continuous latent variable, replicated previous evidence of a concurrent association, and indicated a significant prospective association of initial depressive symptoms with subsequent Met-S. Initial Met-S was at most only weakly associated with subsequent depressive symptoms, and the former prospective effect was significantly larger. Associations of depressive symptoms and Met-S were significant for both men and women, but somewhat stronger among men. Results support representation of Met-S as a continuous latent variable. The association of initial depressive symptoms with later Met-S suggests that interventions addressing these correlated risk factors may prove useful in preventive efforts.

22. Proeschold-Bell, R.J., Turner, E. L., Bennett, G. G., Yao, J., Li, X.-F., Eagle, D. E., Meyer, R. A., Williams, R. B., Swift, R. Y., Moore, H. E., Kolkin, M. A., Weisner, C. C., Rugani, K. M., Hough, H. J., Williams, V. P., & Toole, D. C. (2017). **A 2-year holistic health and stress intervention: Results of an RCT in clergy.** *American Journal of Preventive Medicine*, 53(3), 290-299. <https://doi.org/10.1016/j.ampere.2017.04.009>

Introduction: This study sought to determine the effect of a 2-year, multicomponent health intervention (Spirited Life) targeting metabolic syndrome and stress simultaneously. **Design:** An RCT using a three-cohort multiple baseline design was conducted in 2010–2014. **Setting/participants:** Participants were United Methodist clergy in North Carolina, U.S., in 2010, invited based on occupational status. Of invited 1,745 clergy, 1,114 consented, provided baseline data, and were randomly assigned to immediate intervention (n=395), 1-year waitlist (n=283), or 2-year waitlist (n=436) cohorts for a 48-month trial duration. **Intervention:** The 2-year intervention consisted of personal goal setting and encouragement to engage in monthly health coaching, an online weight loss intervention, a small grant, and three workshops delivering stress management and theological content supporting healthy behaviors. Participants were not blinded to intervention. **Main outcome measures:** Trial outcomes were metabolic syndrome (primary) and self-reported stress and depressive symptoms (secondary). Intervention effects were estimated in 2016 in an intention-to-treat framework using generalized estimating equations with adjustment for baseline level of the outcome and follow-up time points. Log-link Poisson generalized estimating equations with robust SEs was used to estimate prevalence ratios (PRs) for binary outcomes; mean differences were used for continuous/score outcomes. **Results:** Baseline prevalence of metabolic syndrome was 50.9% and depression was 11.4%. The

12-month intervention effect showed a benefit for metabolic syndrome (PR=0.86, 95% CI=0.79, 0.94, $p<0.001$). This benefit was sustained at 24 months of intervention (PR=0.88; 95% CI=0.78, 1.00, $p<0.04$). There was no significant effect on depression or stress scores. Conclusions: The Spirited Life intervention improved metabolic syndrome prevalence in a population of U.S. Christian clergy and sustained improvements during 24 months of intervention. These findings offer support for long-duration behavior change interventions and population-level interventions that allow participants to set their own health goals.

23. Case, A.D., Eagle, D.E., Yao, J., & Proeschold-Bell, R.J. (2018). **Disentangling race and socioeconomic status in health disparities research: An examination of black and white clergy.** *Journal of Racial and Ethnic Health Disparities*, 5(5), 1014-1022.
<https://doi.org/10.1007/s40615-017-0449-7>

Sophisticated adjustments for socioeconomic status (SES) in health disparities research may help illuminate the independent role of race in health differences between Blacks and Whites. In this study of people who share the same occupation (United Methodist Church clergy) and state of residence (North Carolina), we employed naturalistic and statistical matching to estimate the association between race—above and beyond present SES and other potential confounds—and health disparities. We compared the health of 1414 White and 93 Black clergy. Then, we used propensity scores to match Black and White participants on key socioeconomic, demographic, occupational, and physical activity characteristics and re-examined differences in health. Prior to propensity score matching, Black clergy reported worse physical health than their White counterparts. They had greater body mass index, higher prevalence of diabetes and hypertension, and lower physical health functioning. White clergy reported less favorable mental health. They had higher severity of depression and anxiety symptoms as well as lower quality of life and mental health functioning. Propensity score analysis revealed that matching on SES and other key variables accounted for most, but not all, of the observed racial differences. Racial disparities in hypertension, depression severity, and mental health functioning persisted despite adjustments. Race contributed to health disparities in some outcomes in our study population, above and beyond our measures of participants' present SES and key demographic, occupational, and physical activity variables. This study provides evidence supporting the position that race contributes to health disparities through pathways other than SES.

24. Hybels, C., Blazer, D.G., & Proeschold-Bell, R.J. (2018). **Persistent depressive symptoms in a population with high levels of occupational stress: Trajectories offer insights to both chronicity and resilience.** *Journal of Psychiatric Practice*, 24(6), 399-409.
<https://doi.org/10.1097/PRA.0000000000000337>

Religious participation and spirituality are linked to good mental health. However, clergy may experience more depression than is observed in the general population, which may be due in

part to high job strain. The objectives of this study were to identify distinct longitudinal trajectories of depressive symptoms in clergy and to identify variables associated with each course. The sample was 1172 clergy who were followed for up to 66 months. Depressive symptoms were measured using the Patient Health Questionnaire (PHQ-8), which was administered approximately every 6 months. Latent class trajectory analysis was conducted for group identification, and a 3-class trajectory model fit the data best. Class 1 (38% of the sample) had minimal or no depressive symptoms over time, class 2 (47%) had chronic mild symptoms, and class 3 (15%) had persistent moderate/severe symptoms. Occupational distress was significantly associated with trajectory class. The odds of being in either the chronic mild or the persistent moderate/ severe depressive symptom class were significantly higher for those who were female, for those with fair/poor self-rated health, for those with more perceived financial or occupational stress, for those with lower levels of perceived emotional support, and/or for those with lower levels of spiritual well-being. The class exhibiting resilience to depressive symptoms had higher levels of perceived support and spiritual well-being as well as lower levels of perceived financial and occupational stress. A substantial percentage of clergy, and possibly people in similar helping occupations, may experience significant levels of depressive symptoms that do not remit over time. These individuals may benefit from treatments that address work-related coping.

25. Eagle, D., Hybels, C., & Proeschold-Bell, R.J. (2018). **Perceived social support, received social support, and depression among clergy.** *Journal of Social and Personal Relationships*, 36(7) 2055-2073. <https://doi.org/10.1177/0265407518776134>

We argue that perceived support is best conceptualized more as a measure of how an individual appraises his/her situation rather than a true reflection of how much support he/she receives. To test this theory, we used survey data from the Clergy Health Initiative Panel Survey to examine the relationship between perceived and received social support and their association with depressive symptoms in clergy (N = 1,288). Overall, analyses revealed perceived support had a weak association with received support. Greater perceived support had a significant relationship with lower depressive symptoms. In contrast, greater received support had only a small relationship with lower depressive symptoms, which was fully mediated by perceived support. Our results raise questions about the effectiveness of many clergy social support interventions, which often aim to boost the quality and/or quantity of received social support. We suggest it may be more advantageous to boost perceptions of social support, possibly through cognitive reframing or positive mental health interventions.

26. Proeschold-Bell, R.J., Steinberg, D., Yao, J., Eagle, D.E., Smith, T.W., Cai, G., & Turner, E.L. (2018). **Using a holistic health approach to achieve long-term weight maintenance: Results from the Spirited Life intervention.** *Translational Behavioral Medicine*, 10(1) 223-233. <https://doi.org/10.1093/tbm/iby117>

Weight-loss maintenance is essential to sustain the health benefits of weight loss. Studies with lower intensity intervention supports under real-world conditions are lacking. This study examined changes in weight and cardiometabolic biomarkers among Spirited Life participants following initial 12-month weight loss at 12–24 months and 24–42 months. A total of 719 clergy received a wellness intervention, including a 10-week online weight-loss program in the first 12 months and monthly health coaching throughout 24 months. Mean changes in weight, blood pressure, high-density lipoproteins, and triglycerides were estimated using random effects linear models, accounting for repeated measures. Weight was additionally analyzed in subsamples stratified by body mass index (BMI). At baseline, 17.1% of participants had BMI < 25 kg/m² and 11.8% had BMI ≥ 40 kg/m². Mean 12-month weight loss was –2.4 kg (95% CI: –2.8 kg, –2.1 kg). On average, at 42 months, participants regained weight but did not exceed baseline (–0.5 kg, 95% CI: –1.2 kg, 0.2 kg), improvements in triglycerides were completely sustained (–13.9 mg/dL, 95% CI: –18.6 mg/dL, –9.2 mg/dL), and systolic blood pressure improvements remained significant (–1.9 mmHg, 95% CI: –3.0 mmHg, –0.9 mmHg). Participants with a BMI ≥ 40 kg/m² lost significantly more weight that was sustained at 42 months (–5.8 kg, 95% CI: –8.9 kg, –2.7 kg). The Spirited Life wellness intervention produced weight loss and, for participants with higher levels of obesity, sustained weight-loss maintenance. The intervention was effective for long-term prevention of weight gain among participants with BMI of 25 to ≤40 kg/m², through 42 months. Wellness interventions such as Spirited Life should be considered for adoption.

27. Hough, H., Proeschold-Bell, R.J., Liu, X., Weisner, C., Turner, E.L., & Yao, J. (2019).

Relationships between Sabbath observance and mental, physical, and spiritual health in clergy. *Pastoral Psychology*, 68(2), 171-193. <https://doi.org/10.1007/s11089-018-0838-9>

Keeping the Sabbath, that is, setting a day apart for rest and spiritual rejuvenation, has been related to better mental health and less stress in cross-sectional studies. However, for clergy, keeping Sabbath can be complicated by needing to work on Sundays and the round-the-clock nature of clergy work. Nevertheless, numerous studies demonstrating high depression rates in clergy populations suggest clergy need to attend to their mental health. Religious denomination officials interested in preventing depression in clergy may be tempted to recommend Sabbath keeping, although recommending other forms of rest and rejuvenation, including connecting with others, is also possible. This study examined the relationships of Sabbath-keeping as well as multiple other forms of rest and rejuvenation (vacation, sleep, relaxing activities, and social support) to mental and physical health and spiritual well-being using survey data from 1316 United Methodist clergy. Appropriate regression analyses (logistic, linear, and Poisson) were used to determine which clergy were more likely to keep the Sabbath and examined the relationships between Sabbath-keeping and multiple well-being outcomes. Receiving more social support was strongly associated with Sabbath-keeping. Sabbath-keeping was not significantly related to mental or physical health, after adjusting for covariates such as social support, although Sabbath-keeping was significantly related to higher quality of life and spiritual well-being—the original purpose of Sabbath-keeping—in clergy. To adequately test whether Sabbath-keeping could promote mental health for clergy beyond other forms of rejuvenation, intervention studies are needed.

28. Case, A., Proeschold-Bell, R.J., Keyes, C., Huffman, K., Sittser, K., Wallace, A., Khatiwoda, P., & Parnell, H. (2019). **Attitudes and behaviors that differentiate clergy with positive mental health from those with burnout.** *Journal of Prevention & Intervention in the Community*, 48(1), 94-112. <https://doi.org/10.1080/10852352.2019.1617525>

Clergy provide significant support to their congregants, sometimes at a cost to their mental health. Identifying the factors that enable clergy to flourish in the face of such occupational stressors can inform prevention and intervention efforts to support their well-being. In particular, more research is needed on positive mental health and not only mental health problems. We conducted interviews with 52 clergy to understand the behaviors and attitudes associated with positive mental health in this population. Our consensual grounded theory analytic approach yielded five factors that appear to distinguish clergy with better versus worse mental health. They were: (1) being intentional about health; (2) a “participating in God’s work” orientation to ministry; (3) boundary-setting; (4) lack of boundaries; and (5) ongoing stressors. These findings point to concrete steps that can be taken by clergy and those who care about them to promote their well-being.

29. Milstein, G., Hybels, C., & Proeschold-Bell, R.J. (2019). **A prospective study of clergy spiritual well-being, depressive symptoms, and occupational distress.** *Psychology of Religion and Spirituality*, 12(4), 409-416. <http://dx.doi.org/10.1037/rel0000252>

Work, when stressful, can be dispiriting. There are bidirectional and longitudinal links between occupational stress and depressive symptoms. Also, higher levels of religious participation are associated with lower levels of depressive symptoms and work distress. Some have argued that religious participation is a proxy for social support, rather than an independent variable. In order to study the independent association of religious participation with depressive symptoms and occupational distress, this longitudinal study of 895 United Methodist clergy measured the prospective relationships of spiritual wellbeing, depressive symptoms, and occupational distress, while controlling for a measure of social support. As expected, spiritual well-being, depressive symptoms and occupational distress were all significantly correlated at Time 1. Residualized change linear regression models assessed their prospective effects between Time 1 and Time 2 (1 year later). Higher levels of spiritual well-being were protective against increased depressive symptoms, even when controlling for perceived emotional support. In addition, lower levels of depressive symptoms were protective against increased occupational distress. Surprisingly, occupational distress did not predict depressive symptoms. Neither occupational distress nor depressive symptoms predicted spiritual well-being. The findings indicate a longitudinal and directional pattern, with lower spiritual well-being predicting depressive symptoms, which in turn predicted occupational distress. These findings suggest future intervention research for clergy, with a focus on spiritual well-being, and an overall goal of reducing depression and improving occupational function. More broadly, the results support an effect of spiritual well-being independent of social support.

30. Lutz, J., & Eagle, D. E. (2019). **Social networks, support, and depressive symptoms: Gender differences among clergy.** *Socius*, 5, <https://doi.org/10.1177/2378023119873821>

This study extends social-psychological research on social networks and mental health by examining cross-gender differences in social integration and depression among United Methodist clergy in North Carolina. Using data from the fifth wave of the Clergy Health Initiative panel survey, we used cross-group models to examine the association of depressive symptoms and network in-degree, out-degree, and perceived social isolation among men (N = 1,145) and women (N = 535) clergy. The analysis reveals gendered differences in this association. Specifically, out-degree bore a significant negative relationship with depressive symptoms for men but not women. Feeling socially isolated had a significant positive association with depression in both men and women.

31. Hybels, C. F., Blazer, D. G., Eagle, D. E., & Proeschold-Bell, R.J. (2020). **Age differences in trajectories of depressive, anxiety, and burnout symptoms in a population with a high likelihood of persistent occupational distress.** *International Psychogeriatrics*, 34(1), 21-32.

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Work in occupations with higher levels of occupational stress can bring mental health costs. Many older adults worldwide are continuing to work past traditional retirement age, raising the question whether older adults experience depression, anxiety, or burnout at the same or greater levels as younger workers, and whether there are differences by age in these levels over time. Design/Setting/Participants: Longitudinal survey of 1161 currently employed United States clergy followed every 6-12 months for up to 66 months. Depression was measured with the 8-item Patient Health Questionnaire (PHQ-8). Anxiety was measured using the anxiety component of the Hospital Anxiety and Depression Scale (HADS). Burnout symptoms were assessed using the three components of the Maslach Burnout Inventory: emotional exhaustion, depersonalization, and sense of accomplishment. Older participants had lower scores of depression, anxiety, emotional exhaustion and depersonalization and higher levels of a sense of accomplishment over time compared to younger adults. Levels of emotional exhaustion decreased for older working adults, while not significantly changing over time for those younger. Depersonalization symptoms decreased over time among those 55 years or older, but increased among those 25-54 years. Older working adults may have higher levels of resilience and be able to balance personal life with their occupation as well as may engage in certain behaviors that increase social support and, for clergy, spiritual well-being that may decrease stress in a way that allows these older adults to appear to tolerate working longer without poorer mental health outcomes.

32. Keyes, C., Yao, J., Hybels, C. F., Milstein, G., & Proeschold-Bell, R. J. (2020). **Are changes in positive mental health associated with increased likelihood of depression over a two-year period? A test of the mental health promotion and protection hypotheses.** *Journal of Affective Disorders*, 270, 136–142. Copyright © 2020 Elsevier B.V.
<https://doi.org/10.1016/j.jad.2020.03.056>

This paper investigates the mental health promotion and protection (MHPP) model of reducing depression. Data are from the Clergy Health Initiative Longitudinal Survey of United Methodist ministers in North Carolina that included the Mental Health Continuum Short Form (MHC-SF) for positive mental health and the Patient Health Questionnaire (PHQ-9) for depression in 2014 and 2016 (N=955). The promotion hypothesis predicts reduced risk of depression in 2016 among clergy whose mental health increased to flourishing and the increased risk of depression in 2016 for clergy who stayed not flourishing. The protection hypothesis predicts increased risk of depression in 2016 for clergy who were flourishing in 2014 but went down to 'not flourishing' in 2016. The reference group is clergy who stayed flourishing. We used modified Poisson regression models for binary outcomes to estimate Prevalence Ratios (PR) and to estimate Incidence Rate Ratios (IRR) of depression in 2016 associated with changes in mental health status. Results support both hypotheses. Compared to clergy who stayed flourishing, clergy who improved to flourishing were as likely, while clergy who stayed not flourishing were nearly seven times more likely, to have depression in 2016. Clergy who declined to not flourishing were six times more likely to have depression in 2016 compared to those who stayed flourishing. Similar patterns were observed when the sample was restricted to clergy without depression in 2014. These findings suggest focusing on MHPP as a complementary approach to treatment to reduce the incidence, prevalence and burden of depression.

33. Hamm, A. K., & Eagle, D. E. (2021). **Clergy who leave congregational ministry: A review of the literature.** *Journal of Psychology and Theology*, 49(4), 291-307.
<https://doi.org/10.1177/00916471211011597>

Since its inception in the 1960s, research on premature (pre-retirement) clergy attrition from congregational ministry has focused on identifying the factors that precipitate and mitigate ministry exits, while the rates at which clergy leave the ministry have been inconsistently tracked. The literature on clergy attrition is peppered with claims of alarmingly high rates of departure, however, these studies lack strong empirical support. The evidence, while fragmentary, consistently shows that pastors do not leave congregational ministry in large numbers. Incidence of attrition of about 1–2 percent per year is typical across Protestant denominations and among Roman Catholic priests. In addition, contrary to popular conceptions, there is little evidence attrition is particularly high in the first 5 years of congregational ministry. In terms of the reasons for leaving, among Protestants, the most common factor named is conflict with the congregation or denominational system; a smaller number leave to pursue personal goals or to care for family. Among Catholics, loneliness and isolation, tied in major part to the celibacy

requirement, are the most significant reasons cited for leaving. Finances or a loss of faith are rarely cited as reasons for leaving among either Catholics or Protestants.

34. Johnston, E. F., Eagle, D. E., Headley, J., & Holleman, A. (2021). **Pastoral ministry in unsettled times: A qualitative study of the experiences of clergy during the COVID-19 pandemic.** *Review of Religious Research*, 1–23. Advance online publication. Copyright © 2021 Springer Nature. <https://doi.org/10.1007/s13644-021-00465-y>

Background: COVID-19 and its associated restrictions around in-person gatherings have created unprecedented challenges for religious congregations and those who lead them. While several surveys have attempted to describe how pastors and congregations responded to COVID-19, these provide a relatively thin picture of how COVID-19 is impacting religious life. There is scant qualitative data describing the lived reality of religious leaders and communities during the pandemic. Purpose and Methods: This paper provides a more detailed look at how pastors and congregations experienced and responded to COVID-19 and its associated restrictions in the early period of the pandemic. To do so, we draw from 26 in-depth interviews with church-appointed United Methodist (UMC) pastors conducted between June and August 2020. Pastors were asked to describe how their ministry changed as a result of COVID-19 and interviews were analyzed using applied thematic analysis approaches to identify the most common emergent themes. Results: Pastors reported that COVID-19 fundamentally unsettled routine ways of doing ministry. This disruption generated both challenges and opportunities for clergy and their congregations. In the findings, we describe how clergy responded in key areas of ministry – worship and pastoral care – and analyze how the pandemic is (re)shaping the way that clergy understood their role as pastors and envisioned the future of the Church. We argue for the value of examining the pandemic as an “unsettled” cultural period (Swidler 1986) in which religious leaders found creative ways to (re)do ministry in the context of social distancing. Rather than starting from scratch, we found that pastors drew from and modified existing symbolic and practical tools to fit pandemic-related constraints on religious life. Notably, however, we found that “redoing” ministry was easier and more effective in some areas (worship) than others (pastoral care). Conclusions and Implications: The impact of COVID-19 on pastors and congregations is complex and not fully captured by survey research. This study provides a baseline for investigating similarities and differences in the responses of pastors within and across denominations and traditions. It also provides a baseline for assessing whether changes in ministry implemented during the early stages of the pandemic remain in place in the post-COVID world.

35. David E. Eagle, Erin F. Johnston, Jennifer Headley, and Anna Holleman. (2021). **The financial impacts of COVID-19 on United Methodist Churches in North Carolina: A qualitative study of pastors' perspectives and strategies.** *Review of Religious Research* 64(2), 399-420. <https://doi.org/10.1007/s13644-021-00474-x>

Background: In the wake of the COVID-19 pandemic, churches in the United States were forced to stop meeting in person and move to remote forms of worship and congregational life. This shift likely impacted congregational finances, which are primarily driven by individual donations. Initial research has suggested that there is a great deal of heterogeneity in the financial impact on congregations, but there has been scant research examining how pastors and congregations are managing finances during this period. **Purpose:** This research examines the impact of COVID-19 and its associated restrictions on congregational finances and the strategies pastors used to adapt their church's finances to the health restrictions.

Methods: We conducted in-depth, qualitative interviews with 50 pastors in the North Carolina and Western North Carolina Conferences of the United Methodist Church appointed to 70 congregations. Using applied thematic analysis, we analyzed transcripts at both the pastor and congregation-level to identify similarities and differences in financial impact, financial strategies, and pastor experiences during the pandemic. **Results:** Most congregations reported small decreases in giving that were offset by federal Paycheck Protection Program (PPP) loans and other grants from the denomination. Some congregations, mostly urban and fairly large, reported significant increases in giving, while several other, predominantly small congregations, reported their church's finances had been negatively impacted by the pandemic. Even in cases where the net impact of the pandemic was small or non-existent, pastors were forced to adopt a host of new strategies to manage finances. In general, small and large congregations experienced and responded to the financial impact of the pandemic very differently and **Implications.** **Conclusions:** This research suggests that the pandemic's impact on congregational finances were more than just on the bottom line. And while most churches weathered the economic challenges without severe impacts, questions remain as to the long-term impact of the pandemic on church finances.

36. Proeschold-Bell, R. J., Stringfield, B., Yao, J., Choi, J., Eagle, D., Hybels, C., Parnell, H., Keefe, K., & Shilling, S. (2021). **Changes in Sabbath-keeping and mental health over time: Evaluation findings from the Sabbath Living study.** *Journal of Psychology and Theology* 50(2), 123-138. <https://doi.org/10.1177/00916471211046227>

Work-related stress is experienced at a high level in the United States. Clergy are particularly likely to over-extend themselves to act on their sacred call. Sabbath-keeping may offer a practice that is beneficial for mental health, yet many Protestant clergy do not keep a regular Sabbath. We examined whether United Methodist clergy who attended informative Sabbath-keeping workshops reported changes in spiritual well-being and mental health post-workshop.

Compared to baseline, at 3- and 9-months post-workshop, participants reported an increase in Sabbath-keeping. In adjusted random effects and Poisson models, compared to not changing Sabbath-keeping frequency, increasing Sabbath-keeping was related to only one outcome: greater feelings of personal accomplishment at work. Decreasing Sabbath-keeping was related to worse anxiety symptoms, lower spiritual well-being in ministry scores, and a higher probability of having less than flourishing mental health. For four outcomes, there were no significant associations with changes in Sabbath-keeping over time. Although lacking a control group, this study adds to cross-sectional Sabbath-keeping studies by correlating changes in Sabbath-keeping with changes in mental health outcomes over time.

37. Eagle, D.E., & Mueller, C.W. (2022). **Reproducing inequality in a formally anti-racist organization: The case of racialized career pathways in the United Methodist Church.** *American Journal of Sociology*, 127(5), 1507-1550. <https://doi.org/10.1086/719391>

Victor Ray argues organizations are racial structures that legitimate the unequal distribution of resources and stratify the agency of racial groups through organizational processes that treat White identity as a credential and decouple formal rules meant to reduce disparities from practice. This study demonstrates the utility of this theory in an empirical case study of disparities in earnings, job quality, and advancement among clergy in the United Methodist Church. Despite the preferences articulated by Black clergy, the formal organizational policies that ban race as a consideration in appointment making were decoupled from managerial practices; thus, clergy and congregations were matched on race. Because of local control over salaries and major resource disparities between congregations, race matching led to Black-White disparities in pay, advancement, working conditions, and professional support. The most promising remedy is a common salary scale with a more comprehensive redistribution process to address resources inequalities across congregations.

38. Biru, B., Yao, J., Plunkett, J., Hybels, C.F., Kim, E. T., Eagle, D. E., Choi, J., & Proeschold-Bell, R.J. (2022). **The gap in mental health service utilization among United Methodist clergy with anxiety and depressive symptoms.** *Journal of Religion and Health*, 62(3), 1597-1615. <https://doi.org/10.1007/s10943-022-01699-y>

Clergy are tasked with multiple interpersonal administrative, organizational, and religious responsibilities, such as preaching, teaching, counseling, administering sacraments, developing lay leader skills, and providing leadership and vision for the congregation and community. The high expectations and demands placed on them put them at an increased risk for mental distress such as depression and anxiety. Little is known about whether and how clergy, helpers themselves, receive care when they experience mental distress. All active United Methodist Church (UMC) clergy in North Carolina were recruited to take a survey in 2019 comprising validated depression and anxiety screeners and questions about mental health service utilization. Bivariate and Poisson regression analyses were conducted on the subset of

participants with elevated depressive and anxiety symptoms to determine the extent of mental health service use during four different timeframes and the relationship between service use and sociodemographic variables. A total of 1,489 clergy participated. Of the 222 (15%) who had elevated anxiety or depressive symptoms or both, 49.1% had not ever or recently (in the past two years) seen a mental health professional. Participants were more likely to report using services currently or recently (in the past two years) if they were younger, had depression before age 21, or "very often" felt loved and cared for by their congregation. The rate of mental health service use among UMC clergy is comparable to the national average of service use by US adults with mental distress. However, it is concerning that 49% of clergy with elevated symptoms were not engaged in care. This study points to clergy subgroups to target for an increase in mental health service use. Strategies to support clergy and minimize mental health stigma are needed.

39. Holleman, Anna. (2022). **The resilience of clergywomen?: Gender and the relationship between occupational distress and mental health among congregational leaders.** *Journal for the Scientific Study of Religion*, 62(1), 89-107. <https://doi.org/10.1111/jssr.12817>

Religious leaders face unique vocational challenges that place their mental health at risk. As the clergy as a profession has traditionally been male-dominated, clergywoman experience greater occupational stress than their clergymen colleagues, putting their mental health at additional risk. However, past research offers varied evidence on the gendered nature of clergy health, suggesting that clergywomen may be especially resilient to some difficulties of clergy work. Using panel data from the Clergy Health Initiative, a sample of United Methodist pastors from 2010 to 2021, this study examines clergy-specific occupational stress and its gendered relationship with depression. I find that, while clergywomen experience higher levels of occupational stress, the relationship between occupational stress and depression is weaker for clergywomen as compared to clergymen. This study thus offers a new perspective on the gendered nature of the pastorate: that clergywomen may be able to more effectively cope with vocational difficulties than clergymen.

40. Johnston, Erin F., David E. Eagle, Brian Perry, Amy Cornelli, and Rae Jean Proeschold-Bell. (2022). **Seminary students and physical health: Beliefs, intentions, and behaviors.** *Journal of Religion and Health*, 61(2), 1207-1225. <https://doi.org/10.1007/s10943-021-01480-7>

As an occupational group, clergy exhibit numerous physical health problems. Given the physical health problems faced by clergy, understanding where physical health falls within the priorities of seminary students, the ways students conceptualize physical health, and how seminary students do or do not attend to their physical health in the years immediately prior to becoming clergy, can inform intervention development for both seminary students and clergy. Moreover, understanding and shaping the health practices of aspiring clergy may be particularly impactful, with cascading effects, as clergy serve as important role models for their congregants. Drawing on 36 in-depth, qualitative interviews with first-year seminary students, this study examines the

complex dynamics between religious frameworks related to physical health, explicit intentions to maintain healthy practices, and reported physical health behaviors. Our findings suggest that even students who deploy religious frameworks in relation to their physical health—and who, as a result, possess positive intentions to implement and maintain healthy behaviors—often report being unable to live up to their aspirations, especially in the face of barriers to health practices posed by the seminary program itself. After reviewing these findings, we offer suggestions for physical health focused interventions, including action and coping planning, which could be implemented at seminaries to reduce the intention–behavior gap and improve clergy health.

41. Johnston, Erin F. and David E. Eagle. (2022). **Expanding the horizontal call: A typology of social influences on the call to ministry.** *Journal for the Scientific Study of Religion*, 62(1), 68-88. <https://doi-org.proxy.lib.duke.edu/10.1111/jssr.12816>

This research examines the social actors and interactions that facilitate seminary students' sense of calling. Drawing from 36 in-depth interviews with first year Masters of Divinity students, we introduce six ideal typical social others who play a formative role in the early stages of a call to ministry: instigators, exemplars, interpreters, affirmers, challengers, and co-discerners. Together, these findings demonstrate that the call to ministry, while deeply personal, emerges through social interactions that facilitate and make plausible a person's sense of calling and which sustain it over time. Extending Richard Pitt's (2012) conceptualization of the "horizontal call," this paper argues that social others help evoke and solidify – not merely legitimate – a personal sense of call. This research also highlights differences in the social structuring of call by gender. Despite considerable gains in the ordination of women, we find that many still face obstacles to experiencing and embracing a call to ministry.

42. Ferguson, Todd W. and Josh Packard. (2022). **Stuck: Why clergy are alienated from their calling, congregation, and career...And what to do about it.** Minneapolis, MN: Fortress Press

Stuck is a guide for understanding how and why a traditional approach to ministry does not align with the modern realities facing pastors, congregations, and seminaries. More than simply describing findings from their firsthand research, however, Todd W. Ferguson and Josh Packard offer a new understanding of why professional ministry can be so alienating today. *Stuck* shifts the dominant narrative around calling, vocation, and ministry away from a focus on individual traits and characteristics of pastors and congregational leaders and toward a more structural understanding of the social forces that impact modern ministry. The authors focus on the nature of calling; the need for modern, flexible congregational supports; and a different approach to training professional clergy. *Stuck* lets pastors who feel stuck know that they're not alone, they're not crazy, and it's not their fault. It helps congregations be more supportive of their clergy. And it participates in the conversation for reshaping seminary training and professional development.

43. Proeschold-Bell, R.J., Eagle, D.E., Tice, L.C. *et al.* (2023). **The Selah pilot study of spiritual, mindfulness, and stress inoculation practices on stress-related outcomes among United Methodist Clergy in the United States.** *J Relig Health*. <https://doi.org/10.1007/s10943-023-01848-x>

The job–demand–control–support model indicates that clergy are at high risk for chronic stress and adverse health outcomes. A multi-group pre-test–post-test design was used to evaluate the feasibility, acceptability, and range of outcome effect sizes for four potentially stress-reducing interventions: stress inoculation training, mindfulness-based stress reduction (MBSR), the Daily Examen, and Centering Prayer. All United Methodist clergy in North Carolina were eligible and recruited via email to attend their preferred intervention. Surveys at 0, 3, and 12 weeks assessed symptoms of stress, anxiety, and perceived stress reactivity. Heart rate variability (HRV) was assessed at baseline and 12 weeks using 24 h ambulatory heart rate monitoring data. A subset of participants completed in-depth interviews and reported skill practice using daily text messages. Standardized mean differences with 95% and 75% confidence intervals were calculated for the change observed in each intervention from baseline to 3- and 12-weeks post-baseline to determine the range of effect sizes likely to be observed in a definitive trial. 71 clergy participated in an intervention. The daily percentage of participants engaging in stress management practices ranged from 47% (MBSR) to 69% (Examen). Results suggest that participation in Daily Examen, stress inoculation, or MBSR interventions could plausibly result in improvement in stress and anxiety at 12 weeks with small-to-large effect sizes. Small effect sizes on change in HRV were plausible for MBSR and Centering Prayer from baseline to 12 weeks. All four interventions were feasible and acceptable, although Centering Prayer had lower enrollment and mixed results.

44. Eagle, D., Gaghan, J., & Johnston, E. (2023). **Introducing the seminary to early ministry study.** *Religious Education*, 118(2), 133-145. <https://doi.org/10.1080/00344087.2023.2199240>

The Seminary to Early Ministry (SEM) Study is a mixed-method, prospective study designed to provide high-quality empirical data on student formation in theological education. The study will use a series of surveys and in-depth interviews to track three cohorts of divinity school students from matriculation into the early years of their careers. As a result, the study hopes to compile the most comprehensive longitudinal dataset on theological education to date, enabling researchers to better understand who attends seminaries, how seminaries form students, and how the training of future religious leaders can be improved.

45. Johnston, Erin F., Jennifer Headley, and David E. Eagle. (2023). **Pastoring in a pandemic: supports used and desired by United Methodist clergy in the early period of the COVID-19 pandemic.** *Journal of Psychology and Theology*. <https://doi.org/10.1177/00916471231182737>

COVID-19 and its associated restrictions around in-person gatherings fundamentally unsettled routine ways of doing ministry. In this article, we draw on 50 in-depth interviews conducted with United Methodist clergy in the early period of the COVID-19 pandemic (June 2020–January 2021) to examine the *sources* and *types* of social support pastors relied on during this time. We found that most clergy reported drawing from a diverse eco-system of social supports and turned to different *sources* of support—for example, other clergy, local church members, and denominational leaders—for different *types* of support—for example, informational, instrumental, and/or emotional. This study extends existing research on clergy well-being by examining whether the social support used by clergy during the COVID-19 map onto those identified in previous research and by specifying the types of support that were most salient. In the discussion, we consider the broader implications of our findings for clergy well-being beyond the pandemic period.

46. Tice, L. C., Eagle, D. E., Rash, J. A., Larkins, J. S., Labrecque, S. M., Platt, A., Yao, J., & Proeschold-Bell, R. J. (2021). **Rationale and preferences trial design to test three approaches to reduce stress symptoms among clergy.** *Trials*, 22, 892. <https://doi.org/10.1186/s13063-021-05845-x>

Like many helping professionals in emotional labor occupations, clergy experience high rates of mental and physical comorbidities. Regular stress management practices may reduce stress-related symptoms and morbidity, but more research is needed into what practices can be reliably included in busy lifestyles and practiced at a high enough level to meaningfully reduce stress symptoms.

47. Yao J., Steinberg D., Turner L., Cai, G., Cameron J., Hybels C., Eagle D., Milstein G., Rash J., & Proeschold-Bell, R.J. (2023). **When shepherds shed: Trajectories of weight, diet and exercise in a holistic health intervention tailored for US Christian clergy.** *Journal of Religion and Health*. <https://doi.org/10.1007/s10943-023-01910-8>

Maintaining healthy behaviors is challenging. Based upon previous reports that in North Carolina (NC), USA, overweight/obese clergy lost weight during a two-year religiously tailored health intervention, we described trajectories of diet, physical activity, and sleep. We investigated whether behavior changes were associated with weight and use of health-promoting theological messages. Improvements were observed in sleep, calorie-dense food intake, and physical activity, with the latter two associated with weight loss. While theological

messages were well-retained, their relationship with behaviors depended on the specific message, behavior, and timing. Findings offer insights into weight loss mechanisms, including the role of theological messages in religiously tailored health interventions.

48. Holleman, A. & Eagle, D. (2023). **Is there a crisis in clergy health?: Reorienting research using a national sample.** *Journal for the Scientific Study of Religion*.
<https://doi.org/10.1111/jssr.12859>

Are religious leaders unusually unhealthy? This question has long occupied scholars interested in the study of religious institutions, and a significant body of research has examined the causes, correlates, and effects of poor health among clergy. In this study, we aimed to: (1) outline the development of, and bias inherent to, the scholarly understanding of clergy health over the past 50 years; (2) test, using a recently collected nationally representative sample of clergy, the standing assumption that clergy are an especially unhealthy vocational group, specifically in terms of depression, obesity, and self-rated health; and (3) identify the major correlates of health among clergy using these data. Contrary to the recent tenor of scholarly research on this subject, our research revealed that clergy are not a particularly unhealthy group. We suggest potential pathways forward to ameliorate the bias inherent in the research into clergy well-being.

49. Upenieks, L. & Eagle, D. (2023). **Divine struggles among those doing God's work: A longitudinal assessment predicting depression and burnout and the role of social support in United Methodist Clergy.** *Sociology of Religion*, 1-29.
<https://doi.org/10.1093/socrel/srad014>

In this study, we examine the role of spiritual struggles among clergy, in the form of “divine struggle” or feelings of alienation from God and their associations with well-being (depressive symptoms and burnout) among clergy. Drawing from a life-stress perspective, we also test whether received and anticipated congregational support moderates these associations. Using two waves of data (2016– 2019) of the Clergy Panel Health Survey of United Methodist clergy in North Carolina (n = 1,261), results suggest that it was clergy who increased in divine struggles over time who had the highest depressive symptom and burnout scores. However, clergy who received significant emotional support from members of their congregation were protected from elevated depressive symptoms and greater burnout. Anticipated congregational support only buffered the relationship between increasing divine struggles and one component of burnout (positive achievement). We offer some broader implications for supporting clergy well-being in the face of divine struggles.

50. Gaghan, J. & Eagle, D. (2023). **Are women elders paid less than men? A brief report from the North Carolina Statewide Longitudinal Survey of United Methodist Clergy.** *Review of Religious Research*, 64(4), 1005-1006. <https://doi.org/10.1007/s13644-022-00522-0>

Our analysis suggests that, while male elders have significantly higher salaries than their female counterparts, these two groups have been equitably compensated for the past decade. These two phenomena can both exist because past gender disparities reverberate long into the careers of clergy. This is because, even though salaries across genders may be treated equally now, they are not making up for lost ground. For example, women starting in ministry in 1990 may have experienced the same rate of salary growth as men from 2010 to 2020, but earned less during this timeframe because they entered this period with lower initial salaries than men. For this reason, our model predicts that, although the salary trajectories for men and women were equal starting ministry in 2010, it may be another decade before there is no difference between the average salaries of men and women pastors. Nevertheless, this projection assumes that recent trends persist—something that remains to be seen. Only time will tell if this continues or if women will hit a glass ceiling as their careers unfold.

51. Upenieks, L. (2023). Spiritually well, mentally well? Examining the early life of religious antecedents of the impact of spiritual well-being on mental health among United Methodist clergy in North Carolina. *Journal of Religion and Health*.
<https://doi.org/10.1007/s10943-023-01822-7>

Research has consistently shown that the seeds of religiosity are planted and begin to take form during early life socialization, but little attention have been given to these dynamics among clergy members. In this study, we consider whether early life religious exposure may amplify the beneficial effects of spiritual well-being (having a “thriving” spiritual life) for mental health and burnout for clergy. Drawing from a life course perspective, we use longitudinal data from the Clergy Health Initiative, which sampled United Methodist Clergy in North Carolina (n = 1330). Key results suggest that higher frequencies of childhood religious attendance were consistently associated with lower depressive symptoms and burnout. The beneficial associations between spiritual well-being and lower depressive symptoms and burnout were also stronger for clergy with greater church attendance in childhood. The accumulation of “religious capital” for clergy who were raised in religious households with regular service attendance appear to accentuate the positive effects of spiritual wellbeing, which encompass a greater sense of closeness to God in their own lives and in ministry. This study identifies the importance of researchers taking a “longer” view of the religious and spiritual lives of clergy.

52. Johnston, E., Holleman, A., & Krull, L. (2023). **There's theology and then there's the people I love...: Authority and ambivalence in seminarians' attitudes toward same-sex relationships, marriage, and ordination.** *Sociology of Religion*. <https://doi.org/10.1093/socrel/srad040>

Drawing from 102 in-depth interviews conducted with first-year Master of Divinity (M.Div.) students at a Mainline Protestant seminary, this paper examines how students describe and account for their positions on homosexuality, same-sex marriage, and the ordination of gay and lesbian clergy. We found that students on “both sides”—i.e., those who lean affirming and those who lean nonaffirming—invoked three primary authorities in their accounts: Biblical authority, Godly authority, and the authority of lived experience, as demonstrated in the lives of gay and lesbian people. We also found that nearly one-third of the students in our sample expressed uncertainty, ambivalence, and/or contradictions in their responses. Through a close analysis of these accounts, we show that ambivalence and uncertainty are rooted in attempts to navigate and “reconcile” the pulls of these different authorities and that attitudinal certainty is often accomplished by privileging one authority over others.

53. Holleman, A., Upenieks, L., & Eagle, D. (2023). **Adverse childhood experiences among seminarians: Personal experiences of trauma and implications for pastoral well-being and ministerial training.** *Journal of Psychology and Theology*, 52(1):3-17. <https://doi.org/10.1177/00916471231206361>

Recent research has shown Mainline Protestant clergy evidence poor mental health. In accounting for this, research has focused on occupational factors that impact health, with less attention paid to the role of selection into ministry as it relates to health. We investigate one possible selection characteristic, adverse childhood experiences (ACEs), among a sample of 535 seminarians attending a Mainline seminary. Compared with a demographically matched national sample, these seminarians reported higher prevalence of the childhood experiences of emotional abuse, of living with someone with mental illness, and of sexual abuse. These seminarians also reported lower prevalence of parental separation/divorce and of familial incarceration. Furthermore, we found demographic variations in the prevalence of certain ACEs among the sample of seminarians. In addition to informing the scholarly discussion regarding mechanisms associated with clergy well-being, this work highlights the need for seminaries to attend to the ministerial formation of students with these experiences.

54. Proeschold-Bell, R. J., Eagle, D. E., Tice, L. C., Yao, J., Rash, J. A., Choi, J. Y., Stringfield, B., & Labrecque, S. M. (2023). **The Selah pilot study of spiritual, mindfulness, and stress inoculation practices on stress-related outcomes among United Methodist clergy in the United States.** *Journal of Religion and Health*, 62(4), 2686–2710.
<https://doi.org/10.1007/s10943-023-01848-x>

The job–demand–control–support model indicates that clergy are at high risk for chronic stress and adverse health outcomes. A multi-group pre-test–post-test design was used to evaluate the feasibility, acceptability, and range of outcome effect sizes for four potentially stress-reducing interventions: stress inoculation training, mindfulness-based stress reduction (MBSR), the Daily Examen, and Centering Prayer. All United Methodist clergy in North Carolina were eligible and recruited via email to attend their preferred intervention. Surveys at 0, 3, and 12 weeks assessed symptoms of stress, anxiety, and perceived stress reactivity. Heart rate variability (HRV) was assessed at baseline and 12 weeks using 24 h ambulatory heart rate monitoring data. A subset of participants completed in-depth interviews and reported skill practice using daily text messages. Standardized mean differences with 95% and 75% confidence intervals were calculated for the change observed in each intervention from baseline to 3- and 12-weeks post-baseline to determine the range of effect sizes likely to be observed in a definitive trial. 71 clergy participated in an intervention. The daily percentage of participants engaging in stress management practices ranged from 47% (MBSR) to 69% (Examen). Results suggest that participation in Daily Examen, stress inoculation, or MBSR interventions could plausibly result in improvement in stress and anxiety at 12 weeks with small-to-large effect sizes. Small effect sizes on change in HRV were plausible for MBSR and Centering Prayer from baseline to 12 weeks. All four interventions were feasible and acceptable, although Centering Prayer had lower enrollment and mixed results.

55. Lee, B. H. J., Holleman, A., & Proeschold-Bell, R. J. (2024). **Stability and shifts in the combined positive and negative mental health of clergy: A longitudinal latent class and latent transition analysis study of United Methodist pastors before and after the onset of COVID-19.** *Social Science & Medicine*, 344.
<https://doi.org/10.1016/j.socscimed.2024.116651>

COVID-19 and its associated restrictions presented unprecedented challenges for those in the helping professions. In this study, we seek to understand how the mental health of those who belong to one specific helping profession – clergy – changed in the context of COVID-19. Using longitudinal data of a sample of United Methodist pastors from the North Carolina Clergy Health Initiative, we conduct both cross-sectional and person-centered analyses to investigate how the overall mental health of this occupational group changed, as well as how different subgroups of clergy fared within the context of the pandemic, depending on their well-being prior to the onset of COVID-19. We found that the mental health of pastors suffered within the context of the pandemic, but that individual changes in mental health differed based on what

the combined positive and negative mental health patterns of clergy were prior to the pandemic, for which we used latent class analysis to identify as Flourishing, Distressed, Languishing, or Burdened but Fulfilled. Of these subgroups, having Flourishing pre-pandemic status was protective of mental health following the onset of COVID-19, whereas the other three subgroups' mental health statuses worsened. This study is the one of the first longitudinal studies of helping professionals which has tracked changes in mental health before and after the onset of COVID-19. Our findings demonstrate the utility of considering positive and negative mental health indicators together, and they point to certain groups that can be targeted with well-being resources during future periods of acute or abnormal stress.

56. Proeschold-Bell, R. J., Eagle, D., Tice, L., Platt, A., Yao, J., Larkins, J. S., Kim, E. T., & Rash, J. A. (2024). **The Selah trial: A preference-based partially randomized waitlist control study of three stress management interventions.** *Translational Behavioral Medicine*.
<https://doi.org/10.1093/tbm/ibae017>

Chronic stress undermines psychological and physiological health. We tested three remotely delivered stress management interventions among clergy, accounting for intervention preferences. United Methodist clergy in North Carolina enrolled in a partially randomized, preference-based waitlist control trial. The interventions were: mindfulness-based stress reduction (MBSR), Daily Examen prayer practice, and Stress Proofing (stress inoculation plus breathing skills). Co-primary outcomes were symptoms of stress (Calgary Symptoms of Stress Inventory) and 48-hour ambulatory heart rate variability (HRV) at 12 weeks compared to waitlist control. Survey data were collected at 0, 12, and 24 weeks and 48-hour ambulatory HRV at 0 and 12 weeks. The 255 participants were 91% White and 48% female. Forty-nine participants (22%) without a preference were randomly assigned between the three interventions ($n = 40$) and waitlist control ($n = 9$). Two hundred six participants (78%) with a preference were randomly assigned to waitlist control ($n = 62$) or their preferred intervention ($n = 144$). Compared to waitlist control, MBSR [mean difference (MD) = -0.30 , 95% CI: -0.41 , -0.20 ; $P < .001$] and Stress Proofing (MD = -0.27 , 95% CI: -0.40 , -0.14 ; $P < .001$) participants had lower stress symptoms at 12 weeks; Daily Examen participants did not until 24 weeks (MD = -0.24 , 95% CI: -0.41 , -0.08). MBSR participants demonstrated improvement in HRV at 12 weeks (MD = $+3.32$ ms; 95% CI: 0.21 , 6.44 ; $P = .036$). MBSR demonstrated robust improvement in self-reported and objective physical correlates of stress; Stress Proofing and Daily Examen resulted in improvements in self-reported correlates of stress. These brief practices were sustainable and beneficial for United Methodist clergy during the heightened stressors of the COVID pandemic.

57. Eagle, D., Holleman, A., Olvera, B., & Blackwood, E. (2024). **Prevalence of obesity in religious clergy in the United States: A systematic review and meta-Analysis.** *Obesity Reviews* e13741. <https://doi.org/10.1111/obr.13741>

This systematic review aims to summarize the current body of evidence concerning the prevalence of obesity among clergy (i.e., the officially designated leaders of a religious group) in the United States. Method: From November 2022 to February 2023, five databases, one data repository, and gray matter were searched for articles and data sources. The search was restricted to articles published or raw data collected from 2001 to 2021. Study quality was assessed with a template, and heterogeneity was assessed using the I² statistic. The protocol for this review was registered with PROSPERO (CRD42022376592). Results: Forty-seven studies of clergy obesity involving 35,064 individuals were eligible. The pooled prevalence estimate of obesity across studies was 34.8% (95%confidence interval [CI]: 32.5–37.2). Obesity prevalence was found to be increasing over time and to vary considerably between clergy from different religious traditions. Compared to national estimates, from 2005 onwards, obesity prevalence was higher than in the US adult population.

58. Lee, B. H. J., Yao, J., Ramcharitar-Bourne, A., & Proeschold-Bell, R. J. (2024). **High rates of obesity and chronic diseases among North Carolina United Methodist clergy: An updated analysis.** *North Carolina Medical Journal*, 85(6), 446. <https://doi.org/10.18043/001c.125104>

Varied demands and stressors experienced by clergy can contribute adversely to their overall well-being. Data from United Methodist Church (UMC) clergy in North Carolina in 2008 revealed that clergy had significantly higher non-communicable disease (NCD) rates than their fellow North Carolinians. Using data from the Clergy Health Initiative and Behavioral Risk Factor Surveillance Survey, the present study provided an updated analysis of obesity and 6 other NCDs among North Carolina UMC clergy compared to the general North Carolina population. First, we described the prevalence of each health condition among North Carolina UMC clergy and the general North Carolina population across multiple waves from 2008 to 2021. Then, we compared the predicted probabilities of each health condition in 2021 using logistic regressions to adjust for age, sex, and race. Comparing the unadjusted prevalence of health conditions between 2008 and 2021, we found that North Carolina UMC clergy have higher rates of obesity, hypertension, hypercholesterolemia, diabetes, angina, arthritis, and asthma than North Carolinians overall. Adjusting for age, sex, and race, we found that significantly higher rates of obesity, severe obesity, hypercholesterolemia, and asthma persisted among UMC clergy in 2021 compared to all North Carolinians, with the higher rates of severe obesity being particularly concerning. While the current study is limited to an update of health prevalence among UMC clergy, pastors across denominations are influential leaders in their communities, shaping the physical and social health environments of their congregations. Further research is needed to investigate risk factors, such as relocation and adverse childhood experiences, that may influence the higher prevalence of NCDs within and potentially beyond the UMC.

59. Sohail, M. M., Yao, J., Jane Lee, B. H., Salgado, G. N., & Proeschold-Bell, R. J. (2025). **The relationship between burnout and Outlook, resilience, and other emotional styles: Evidence from United Methodist clergy.** *Journal of Workplace Behavioral Health*, 1-21.
<https://doi.org/10.1080/15555240.2025.2459276>

Emotional styles, which compose an individual's dependable pattern of responses to their temporary emotional states, have been associated with academic success, life satisfaction, and flourishing mental health, but have not been studied in terms of work-related burnout. Navigating emotions is essential across many occupational settings, which makes emotional styles relevant to work and burnout. The current study examines the relationship between emotional styles and burnout among clergy and explores whether emotional styles might moderate the relationship between burnout and length of time in ministry. Drawing from the Clergy Health Initiative Longitudinal Survey, we used the Emotional Styles Questionnaire and the three components of the Maslach Burnout Inventory in multiple regression analyses and found that five emotional styles (Outlook, Resilience, Self-awareness, Sensitivity to Context, Attention) were significantly associated with each burnout outcome. Moderation analyses showed that higher emotional style scores were associated with better burnout scores for participants with more years of ministry experience. These findings provide the groundwork for future longitudinal studies to determine whether change in emotional styles can improve burnout, especially mid-career.

60. Rash, J. A., Eagle, D. E., Tice, L. C., & Proeschold-Bell, R. J. (2025). **An exploration of the mediators and moderators of mindfulness-based stress reduction among clergy: Secondary analysis of data from the Selah trial, a preference-based randomized wait-list-controlled trial.** *International Journal of Stress Management*. <https://dx.doi.org/10.1037/str0000354>

We conducted a secondary analysis of the Selah trial, a preference-based, partially randomized, wait-list controlled trial, to evaluate mediators and effect modifiers of a mindfulness-based stress reduction (MBSR) intervention. Participants were United Methodist clergy enrolled in the Selah trial and allocated to MBSR or wait-list control. Interventions spanned 12 weeks. Self-reported symptoms of stress and cardiac vagal control (CVC) were coprimary outcomes. Participants completed surveys collected 48-hr heart rate data pre and postintervention and responded to daily text messages to record MBSR practice. Ninety-six participants (Mage = 52.4 years; 92% White; 49% female) were allocated to MBSR (n = 54) or wait-list control (n = 42), with 11 participants completing MBSR following the waiting period. Participants allocated to MBSR evidenced significantly greater change in symptoms of stress, M Diff = 0.248, 95% CI [0.13, 0.37]; CVC, M Diff = 2.30, 95% CI [0.13, 4.47]; mindfulness, M Diff = 1.26, 95% CI [0.27, 3.79]; self-reported reactivity to stressors, M Diff = 6.09, 95% CI [3.00, 9.19]; and positive mental health, M Diff = 3.54, 95% CI [0.69, 6.39], relative to wait-list control. Improvement in symptoms of stress was partially mediated by a change in mindfulness and perceived stress reactivity. Effects were not modified by a preference for MBSR intervention, minutes of daily practice, or sex. Finally, changes in symptoms of stress and CVC were bidirectionally related, acting as a partial mediator and suppressor variable, respectively. Results support a central, biological stress resilience

pathway underlying the effects of MBSR on health-related outcomes, which is consistent with the mechanistic stress buffering framework.

61. Ferguson, T. W., Milstein, G., & Yao, J. (2025). **Does Religious Switching Predict Clergy Longitudinal Spiritual Well-being?** *Review of Religious Research*.

<https://doi.org/10.1177/0034673X251330502>

Both religious change and religious continuity are associated with stronger levels of religiosity in the laity. Yet, little is known about how they affect the clergy. This study examines the effects of both religious change and continuity on the spiritual well-being of clergy. Using longitudinal data of United Methodist Church (UMC) leaders in the Clergy Health Initiative Survey (N = 2,050), we categorize pastors into three groups: lifelong members of the UMC ("Remainers"), those who switched into the UMC from another Christian tradition ("Switchers"), and those who converted from a religion (or lack thereof) outside of Christianity ("Converters"). We offer two competing hypotheses: (1) Remainers will have higher levels of spiritual well-being because of greater religious capital, and (2) Switchers and Converters will have higher levels of spiritual well-being because of the "zeal of the convert." We use longitudinal regressions to analyze two measures of spiritual well-being: in daily life and in ministry. We find evidence that Converters and Switchers had higher levels than Remainers only for the measure spiritual well-being in daily life, though which group differed varied by the control variables we used. The findings suggest that there is a "zeal of the convert" even for the clergy.

62. Kim, E. T., Lee, B. H. J., & Proeschold-Bell, R. J. (2025). **Does Flourishing Mental Health Improve Perceived Quality of Life?** *Journal of Happiness Studies*, 26(6), 95.

<https://doi.org/10.1007/s10902-025-00929-w>

Flourishing mental health and quality of life (QoL) are related but distinct positive indicators of wellbeing. This study examined the relationship between flourishing mental health and QoL, specifically by using longitudinal data to determine the directionality of this relationship. Using three waves of data across six years from the Clergy Health Initiative Longitudinal Study (CHILS), we conducted the Random Intercept Cross-lagged Panel Model (RI-CLPM) approach to identify which of these variables may be best conceptualized as a mediator versus an outcome. Our analyses reveal that flourishing mental health had a significant effect on future QoL, while QoL was not significantly associated with future flourishing mental health. These findings indicate that flourishing mental health may be an upstream factor influencing QoL. We expect findings from this study to be relevant not only to policymakers and researchers of positive psychology, but also applicable to other helping professions that are demanding, care giving, and service-oriented in nature.