for the casual reader and a fertile field for the researcher. At \$49.95 for the hardback and just \$9.99 on Kindle, this Mormon product is worth the investment.

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A Barometer for Mormon Social Science

Jana Riess. *The Next Mormons: How Millennials Are Changing the LDS Church.* New York: Oxford University Press, 2019. 328 pp. Introduction, tables, appendices, index. Hardcover: \$29.95. ISBN: 9780190885205.

Reviewed by Ryan Bell

Latter-day Saints studies has long remained the prerogative of scholars in the humanities, lacking commensurate scholarly attention in the social sciences. Periodically, however, a promising piece of social science research is promulgated by investigators seeking to understand the Mormon movement "on the ground." Though usually insightful, these comparatively rare works vary with respect to ambition and sophistication. One such, *The Next Mormons*, emerged this spring. While laudable in its descriptive aims, the work falters on explanatory assertions due to gaps in its research design. Ironically, the book's most interesting analyses fall prone to confounding that causal logic could have obviated. Despite

some methodological issues, author Jana Riess offers a commendable start to tackling important questions on intergenerational belief and practice in the contemporary LDS Church.

This review focuses on what the book demonstrates about the current state of Latter-day Saint scholarship in the social sciences. While there is cause to be encouraged, there is a long way yet to traverse in order to subject the LDS experience to more rigorous empirical social inquiry.

The Next Mormons, published in 2019, is based on a 2016 survey with a matching namesake, "The Next Mormons Survey" (hereafter NMS). The NMS was designed in collaboration with political scientist Benjamin Knoll. Over \$20,000 was crowdfunded in order to contract with Qualtrics, a Seattle and Provo-based survey firm to administer the survey to Mormon and former Mormon respondents. 1 By paying Qualtrics to recruit participants, the firm was able to use a panel-matching technique, a large improvement over the snowball sampling on which former researchers have relied.² Herein lies one way in which this book stands apart from other scholarship: the author and her research partner were able to collect data from a nationally representative sample. This is an encouraging, if expensive, step forward for Mormon social science research as it overcomes the prohibitive issue of non-generalizable findings (e.g., can the findings of the survey be imputed to the general Mormon and former Mormon population?). There is no shortage of studies and surveys seeking to describe the practices and beliefs of

^{1.} For anyone unfamiliar with the term, crowdfunding is soliciting donations from a large number of patrons usually via the internet.

^{2.} Snowball sampling is a method by which a researcher asks respondents to recruit their friends or acquaintances as additional participants in the research project. Thus, by exponential growth, participation should "snowball." Issues with generalizability arise by virtue of homophily. My friends likely have a lot in common just as do yours, therefore research participants recruited through networks likely differ systematically from the rest of the population. Because snowball sampling is nonrandom, we cannot be sure that we aren't collecting data that is biased *ab initio*.

Mormons and former Mormons, the problem is that until now most of these weren't generalizable.³ As such, the descriptive statistics given in the book can be taken largely to represent the Mormon population within stated margins of error. Riess is thus able to make contributions other social scientists have typically not been able to make.

While adhering to a general theme of exploring belief and practice among Mormons and former Mormons, this book covers a wide range of contemporary topics. From race and LGBTQ+ to views on religious authority and sexual practices, Riess reveals how several generations of Latter-day Saints differ from one another in terms of belief and practice. Categorizing the generations in tripartite fashion as Baby Boomer/Silent Generation, Generation X, and Millenials, Riess explores topics thematically, arguing that the Church of Jesus Christ of Latter-day Saints is a changing church at odds with its own longitudinal permanence.

It comes as no surprise that *The Next Mormons* details how Millennials are growing up in less fecund households than their predecessors or that they are generally more liberal in how they view race, sexuality, and gender. But notwithstanding the author's findings, the stability of some intergenerational disparities has yet to be demonstrated. It's difficult not to question whether Riess's conflation of age, period, and cohort effects annul many of her conclusions that differences are based so much on generational affiliation. ⁴ To take one example, will Millenials

^{3.} The exception of course are large-scale surveys like GSS and Pew among others, but these don't focus exclusively on Mormonism.

^{4.} Stephen Cranney, review of *The Next Mormons: How Millenials Are Changing the LDS Church*, by Jana Riess, *BYU Studies*, 58, no. 2 (2019): 177–83. For more on the issue of age, period, and cohort effects and the precarity these present Riess's conclusions, see Cranney's review of Riess's book. Cranney is indeed correct that the only way to solve this issue would be to employ a longitudinal research design.

become more conservative in social views as they age just as it appears Baby Boomers did?⁵

In terms of narrative, description is this book's mainstay. While rich in information, this became tiresome as page after page contained a rotation of bar charts, tables, and the occasional pie chart summarizing components of the survey with simple comparisons of relative frequencies and averages. In places this book reads more like a report of findings complemented by some qualitative data for richness. Rather than building a case for something, the narrative often felt like meandering through basic statistics. This simple comparison strategy left the reader to ask just how monumental differences between generations really were on many measures. For example, is a seven-point difference between Gen X and Millennials on *y belief or practice* a compelling one or not? More sophistication in statistical technique could have gone a long way toward helping the author distinguish what was a compelling contrast from what was not, rather than simply relying on so much comparison of frequencies and means.

In places where more data could have been strategically discussed, the interested reader could be left quite unsatisfied. For example, Riess captured my attention with the statement, "The NMS finds that a completed mission correlates well with staying Mormon for the long term, even among people who were not very active in the LDS Church growing up. In other words, eight in ten people who had been less active as kids were still Mormon in adulthood if they had served a full-term mission." 6

^{5.} The debate rages on as to this point. As with many things in the social sciences, there are a host of studies on the topic, but a conclusive answer remains elusive. See James Tilley and Geoffrey Evans, "Ageing and Generational Effects on Vote Choice: Combining Cross-Sectional and Panel Data to Estimate APC Effects," *Electoral Studies* 33 (March 2014): 19–27 for an example of both an age *and* a cohort effect on intergenerational conservatism.

^{6.} Jana Riess, *The Next Mormons: How Millennials Are Changing the LDS Church* (New York: Oxford University Press, 2019), 46.

A footnote follows this statement, leading to what one presumes will be a more in-depth discussion of the exciting finding. Rather than explicating the analysis or model which led to the result, the footnote says simply, "I am grateful to Benjamin Knoll for running this and many other analyses of the data." What analyses? Was there a statistical correlation? What was the significance level? Or was this simply the case that, as the text suggests, the author observed that roughly 80 percent of less-active children who also served a mission reported maintaining their Mormon affiliation and assumed some sort of correlation? The precarity of such an approach is immediately obvious to any practitioner of statistics, yet the author leaves it to the reader to rely on the authority of her research partner's analysis for this conclusion. Such a finding would be gripping and worthy of much further research, however, little stock can be placed in it based on how it was presented in the book. Perhaps it was just a poor choice of words, but based on the fact that more advanced statistical analyses were performed and reported elsewhere, why not here as well?

In another place, Riess did attempt a more robust statistical model in a section entitled, "Factors Associated with Greater Belief" near the end of the book's first chapter. Empirically identifying factors promoting belief among Latter-day Saints would be a prodigious contribution to Mormon social science research. Methodologically, this section conformed to standard practice in the social sciences: Riess and Knoll used a multivariate logistic regression with a number of control variables, robust standard errors, and regression diagnostics including tests for multicollinearity and heteroskedasticity. The author reports controlling for a litany of variables including: age, gender, race, income, education,

^{7.} Benjamin Knoll and Jana Riess, "Infected with Doubt: An Empirical Overview of Belief and Non-Belief in Contemporary American Mormonism," *Dialogue: A Journal of Mormon Thought* 50, no. 3 (Fall 2017): 1–38. In conjunction with Benjamin Knoll, the book's author, Jana Riess, co-authored a paper in *Dialogue*, focusing on this portion of the Next Mormons Survey. It is from this paper which I draw details of their methodology for the analysis. The results were merely reported in the book with no real discussion on method.

frequency of church attendance, convert status, marital status, political partisanship, numbers of friends and family who have left the Church, and numbers of Mormons in one's close friendship circle and extended family.

These controls are all to ensure that the possibility of a confounder is eliminated, that is, to make sure what is influencing later belief isn't actually something unexpected like perhaps gender, race, or other variables. That way, the researchers can say, for example, that the only difference between respondents was whether or not they attended church and seminary to observe how each differed with respect to later belief.

The issue with the author's approach to this question is that belief was likely an influential factor in whether one attended seminary or church in the first place. Based on this analysis, there is no way to demonstrate that variation in later belief is attributable directly to attendance at church or seminary independent of prior belief. It is equally as plausible that those who attended seminary and church did so *because* they already believed—and thus their greater levels of belief later in life were *not* due to church or seminary attendance. Quite possibly these individuals, already believing, would have reported greater levels of belief without church or seminary attendance at all. This is a significant problem. Ancillary measures of activity such as serving a mission are not a satisfactory surrogate measure for actual belief in youth.⁸

This isn't splitting hairs or asking for the impossible. In fact, there are a few ways this could have been avoided, utilizing the vast literature extant on causal inference using observational data. Directed acyclic

^{8.} Knoll and Riess, "Infected with Doubt," 16. The authors briefly acknowledge the possibility of "dual-causation" in their article, however no satisfactory remedy is offered. In one place they state, "the fact that this analysis controls for other factors that are also correlated with strong activity growing up strongly suggests that attending seminary has at least some causative effect on the likelihood of being a Believer later in life." These gymnastics are unnecessary and unproductive, measuring prior belief would have been a more direct remedy to the problem.

graphs (DAGs) could have assisted in meeting Judea Pearl's backdoor path criterion. But this presupposes knowledge of the full graphical structure of the covariate set and their relations to one another—perhaps too strenuous a requirement given the subject matter. Therefore, covariates could be subjected to the disjunctive cause criterion simply by asking whether each is a cause of the treatment *and* the outcome. ¹⁰

In either case, rather than constructing an eclectic model with a cacophony of control variables, more reasoned design by causal inference might have revealed the error and made for a more elegant, reasoned and valid model; then the confounder could have been eliminated by stratifying or conditioning on prior belief.¹¹ In terms of measuring prior

^{11.} The researchers could have directly measured an individual's prior belief any number of ways and then conditioned or stratified on this. Simply conceived, such a strategy would be intended to calculate the average treatment effect among the control and the treated. The table following is to visualize the concept, I make no argument here as to ideal cutpoints:

	Treatment		
Prior State	Treatment = 1 [Attended church]	Treatment = 0 [Did not attend church]	Total Outcome [Belief]
Prior Believer			
Prior Doubter			
Total Outcome [Belief]			

Through standardization, we can also calculate the expected value of the observed outcome averaged over the distribution of the covariate of interest:

^{9.} Judea Pearl, *Causality: Models, Reasoning, and Inference,* 2nd ed. (Cambridge: Cambridge University Press, 2009). It is helpful when designing a model to conceptualize it in a causal graph, sometimes called a directed acyclic graph (DAG), in order to visually tease out the logic of controls. Pearl is the household name for causal graphs.

^{10.} Tyler J. VanderWeele and Ilya Shpitser, "A New Criterion for Confounder Selection," *Biometrics* 67, no. 4 (2011): 1406–13.

belief, the risk of social desirability and recall bias would have been no more threatening than on other constructs of the NMS survey and there are myriad ways such concerns could be allayed.¹²

As it stands, Riess's finding that seminary and church attendance are associated with greater belief later in life has little substantive significance. More attention to the logic of research design could have alleviated this problem and allowed for a truly interesting finding.

Imagine if Riess could have justifiably discussed in this book whether, *ceteris paribus*, seminary or church attendance really does influence later belief. That would have been something to write home about.

To conclude, *The Next Mormons* is intriguing in the snapshot it presents on intergenerational Mormon belief and practice, but falls short on deeper, explanatory analysis. This I would have hoped to get more of in a book published by an academic press of high esteem. This does not diminish the book's contribution in establishing many important facts, but it does reflect the current state of Mormon social science research. Description is a laudable aim, and the first step to establishing facts for further exploration.¹³ To advance to the second step, though, social scientists engaged in Latter-day Saint studies will have to utilize more

 $E(Y^a) = \sum_x E(Y|A = a, X = x)P(X = x)$ where *a* is the treatment and *x* is the covariate, in this case, prior belief.

^{12.} Gary King, Christopher J. L Murray, Joshua Salomon, and Ajay Tandon, "Enhancing the Validity and Cross-cultural Comparability of Measurement in Survey Research," *American Political Science Review* 98 (2004): 191–207. Given the Mormon penchant for testimony and "true conversion" I would argue that individuals would reliably recall and relate their belief through time. If concerns remained, the use of vignettes has been shown as a promising way to standardize survey responses open to subjectivity or interpretive bias. Not only could this be of help here, but would likely have been a help on questions later in the book in which Millennials overestimated their own religious behaviors compared to more mature generations. Vignettes could also have assisted in closing the generational gap on the subjective interpretation of survey questions.

^{13.} John H. Goldthorpe, *Sociology as a Population Science* (Cambridge: Cambridge University Press, 2015).

so-called quasi-experimental methods and techniques for observational data. In order to advance, researchers need to move beyond eclectic statistical models in favor of more reasoned research designs.

Despite the critiques, this book is a welcome addition to existing social science research in Latter-day Saint studies as one among few to even approach representative sampling. Pew, GSS, and a small handful of other well-funded research enterprises have been a boon to Mormon social scientists as nationally representative, but lack the flexibility required by Mormon researchers who are able to construct their own surveys. While the generalizable result is something to be emulated, it is unlikely that the NMS will be replicated anytime soon given the prohibitive cost. Most researchers simply aren't able to find donors willing to front \$20,000 for Mormon social science research.

It would be highly encouraging for the data and STATA code on which *The Next Mormons* is based to be anonymized and distributed freely. Replication is an important part of scientific inquiry. Sharing this data with other researchers could lead to many fascinating findings beyond what was raised in *The Next Mormons*. More eyes and minds on the NMS data can get a lot more mileage by sharing code, building models, replicating results, and collaborating on projects that would not be possible for most in the field to do in isolation. It is the same spirit of scholarly cooperation that motivates this review. Riess is clearly an excellent writer and motivated researcher who has procured useful data. Now let's gather the best ideas and methods from disparate ends of academia to learn as much from it as possible.

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