

Examining Prejudice Exhibited by Agriculture Teachers in the Midwestern U.S.

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Introduction

Increasingly over the past decade, the National FFA Organization (2019) has built efforts towards fostering diversity, equity, and inclusion (DEI) within agricultural education programs to strive for respect, connectedness, and affirmation for all people involved. Considering research in education some effects of prejudice have been documented. Sexism, being examined through the generations to recognize that while bias has decreased in severity, participants across generations have experienced gender bias in their role as agriculture teachers (Baxter et al., 2008). Homophobia has been cited as a reason that many gay and lesbian teachers have taken on mental distress to protect themselves by living 'double lives' to separate their public and private selves (Bower-Phipps, 2017; Ferfolja & Hopkins, 2013; Gray, 2013; Griffin, 1992; Jackson, 2006; Mayo, Jr., 2008; Olson, 1987). Finally, race and racism has been examined in the context of FFA, with a critical view of its national convention where urban members cited that they had to reconcile with race and culture barriers in an event that seemed to cater to a white, rural majority (Martin & Kitchel, 2015).

Theoretical Framework

The integrated threat theory of prejudice defines four different threats that interact to cause prejudice (Stephan & Stephan, 2000). These threats, including realistic threats, symbolic threats, intergroup anxiety, and negative stereotypes, can cause prejudice to be directed to outgroups from an ingroup (Stephan & Stephan, 2000). It's important to note that Stephan & Stephan (1993) define prejudice as negative affect, which in turn includes evaluations (disliking) and emotions (hatred) toward outgroups. In acknowledging this definition of prejudice as affective, we must also acknowledge that prejudice does not equate to outward behavior.

Methodology

The purpose of this study was to investigate the levels of prejudice held by SBAE teachers in NAAE Region IV and addresses the National Research Agenda Priority Area 3: Sufficient scientific and professional workforce that addresses the challenges of the 21st century (Stripling & Ricketts, 2016). This study was guided by the following objectives: 1) describe the levels of Social Desirability in the population; 2) describe levels of prejudice exhibited by the population; and 3) examine if prejudice levels differ based on selected demographics.

This study utilized a cross-sectional survey design and was distributed via Qualtrics software using the tailored design method (Dillman et al., 2014). Lists of population names and emails ($n = 2273$) were acquired from state staff or publicly available sources. The recommended sample size for a population this size was 331 (Krejcie & Morgan, 1970), so state proportions of the population were calculated to determine the size of the stratified random sample ($n = 333$) across the region. The instrument for this study was established by modifying existing summated rating scales measuring social desirability ($\alpha = .88$) (Crowne & Marlowe, 1960; Strahan & Gerbasi, 1972; Fischer & Fick, 1993), Neosexism ($\alpha = .76$) (Tougas et al., 1995), Modern Homophobia ($\alpha = .95$) (Raja & Stokes, 1998), and Attitudes Toward Diversity in Coworkers ($\alpha = .78$) (Montei et al., 1996). Validity was established by a panel of experts ($n = 6$), all but one of whom belonged to disenfranchised groups that face the prejudices measured in this study. An initial response rate of 21.6% ($n = 72$) was acquired, and after controlling for non-response error by resampling 20% of nonrespondents ($n = 53$), a final response rate of 37.5% ($n = 135$) was acquired (Lindner et al., 2001). All but one scale calculated desirable Cronbach's alphas larger than .8; Social Desirability calculated an alpha of .6, indicating that caution should be used in interpreting results from this scale (Carmines & Zeller, 1979). Independent-samples *t*-tests were

conducted to compare nonrespondents and respondents. Only one significant difference was found, indicating a medium nonrespondent bias size in homophobia toward lesbians, $t_{121} = -2.06, p = .04, d = .37$. All other variables were considered generalizable to the population.

Results

Objective one was to describe the levels of social desirability in the population. The final scale showed that teachers show moderate socially desirable behaviors ($M = 1.47, SD = .24$), and due to no prejudice variables correlating with social desirability, we determined that answers to these scales were not influenced by social desirability bias (Nederhof, 1985). Objective two was to describe levels of prejudice in the population. Mean scores showed that the sample exhibited slight prejudice toward women ($M = 2.09, SD = .57$) and lesbians ($M = 2.14, SD = .89$); and low prejudice toward gay men ($M = 1.93, SD = .88$) and racial minorities ($M = 1.93, SD = .53$). While all scales had a minimum score of 1, no participant scored 1 for the overall prejudice scale ($M = 2.08, SD = .53$), indicating all participants exhibited some form of prejudice.

Objective three was to examine prejudice differences based on gender (male vs female) and population of participant hometowns (Rural or Suburban/Urban). To examine the effect of these two variables on the initial four prejudice variables, and to determine if there was an interaction effect between the two, a two-way between-subjects Multivariate Analysis of Variance (MANOVA) was conducted (Huberty & Petoskey, 2000). Assumptions were all met through appropriate calculations, except for multivariate outliers. One multivariate outlier was found through comparing Mahalanobis distances of the interaction of the two independent variables to a similar chi-square distribution. This outlier was an individual who selected “prefer not to respond” for gender. This case was removed, and the MANOVA was conducted.

Because equality of covariance was met, Wilks’ Lambda was used to evaluate multivariate tests. Results indicated significant results when comparing prejudice to both gender, $F(4, 101) = 2.997, p = .022, \Lambda = .894, \eta^2_p = .11$; and population of hometown, $F(4, 101) = 3.201, p = .016, \Lambda = .887, \eta^2_p = .11$. However, there was no significant interaction of the two factors, $F(4, 101) = 0.643, p = .633, \Lambda = .975$. Univariate test results show that male participants had higher levels of sexism, $F(1, 104) = 7.896, p = .006, \eta^2_p = .07$; and homophobia toward lesbians, $F(1, 104) = 7.91, p = .006, \eta^2_p = .07$; and gay men, $F(1, 104) = 8.921, p = .004, \eta^2_p = .08$. In addition, participants from rural hometowns showed higher levels of homophobia toward lesbians, $F(1, 104) = 6.457, p = .013, \eta^2_p = .06$; and gay men, $F(1, 104) = 12.052, p = .001, \eta^2_p = .1$; and racism, $F(1, 104) = 4.817, p = .03, \eta^2_p = .04$.

Conclusions/Implications/Recommendations

This study provides evidence that the population exhibits prejudices against others who are women, belong to racial minorities, or identify as gay or lesbian. Particularly, prejudices can be found in higher levels in teachers who are male or those who grew up in rural communities, but without any interaction between these two variables. Because new SBAE teachers from Region IV are overwhelmingly female (74%) and experiencing a historically high rate of retention (97%) (NAAE, 2019), it can be expected that rates of prejudice will decline over coming years when taking gender into account. However, no research was found exploring hometown populations of current and rising teachers. Therefore, it is recommended that researchers consider adding this as a demographic question in future work. Additionally, in DEI work, it is recommended that SBAE state staff and teacher educators focus on tolerance within their diversity programming all teachers, but particularly for pre- and in-service teachers who are male or from rural settings.

References

- Aosved, A. C. & Long, P. J. (2006). Co-occurrence of rape myth acceptance, sexism, racism, homophobia, ageism, classism, and religious intolerance. *Sex Roles*, 55, 481-492. <https://doi.org/10.1007/s11199-006-9101-4>
- Bower-Phipps, L. (2017). Discourses Governing Lesbian, Gay, Bisexual, Transgender, Queer, Intersex, and Asexual Teachers' Disclosure of Sexual Orientation and Gender History. *Issues in Teacher Education*, 26(3), 23-37.
- Carmines E. G., & Zeller R. A. (1979). *Reliability and Validity Assessment*. SAGE Publications. <https://dx.doi.org/10.4135/9781412985642>
- Crowne, D. P. & Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of Consulting Psychology*, 24(4), 349-354.
- Davis, J. A. (1971). *Elementary Survey Analysis*. Prentice-Hall.
- Dillman, D. A., Smyth, J. D., & Christian, L. M. (2014). *Internet, Phone, Mail, and Mixed-Mode Surveys: The Tailored Design Method* (4th ed.). Wiley.
- Ferfolja, T., & Hopkins, L. (2013). The complexities of workplace experience for lesbian and gay teachers. *Critical Studies in Education*, 54(3), 311–324. <https://doi.org/10.1080/17508487.2013.794743>
- Fischer, D. G., & Fick C. (1993). Measuring social desirability: short forms of the Marlowe-Crowne social desirability scale. *Educational and Psychological Measurement*. 53. 417-424. <https://doi.org/10.1177/0013164493053002011>
- Gray, E. M. (2013). Coming out as a lesbian, gay or bisexual teacher: Negotiating private and professional worlds. *Sex Education*, 13(6), 702–714. <https://doi.org/10.1080/14681811.2013.807789>
- Griffin, P. (1992). From Hiding Out to Coming Out: Empowering Lesbian and Gay Educators. *Journal of Homosexuality*, 22(3–4), 167–196. https://doi.org/10.1300/J082v22n03_07
- Huberty, C. J., & Petoskey, M. D. (2000). Multivariate analysis of variance and covariance. In H. E. A. Tinsley & S. D. Brown (Eds.), *Handbook of Applied Multivariate Statistics and Mathematical Modeling*, Academic Press.
- Jackson, J. M. (2006). Removing the Masks: Considerations by Gay and Lesbian Teachers When Negotiating the Closet Door. *Journal of Poverty*, 10(2), 27–52. https://doi.org/10.1300/J134v10n02_03
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30, 607-610. <https://doi.org/10.1177/001316447003000308>
- Lindner, J. R., Murphy, T. H., & Briers, G. E. (2001). Handling nonresponse in social science research. *Journal of Agricultural Education*, 42(4), 43-53.
- Mayo Jr., J.B. (2008). Gay Teachers' Negotiated Interactions with Their Students and (Straight) Colleagues. *The High School Journal*, 92(1), 1–10. <https://doi.org/10.1353/hsj.0.0007>
- Montei, M. S., Addams, G. A., & Eggers L. M. (1996). Validity of scores on the attitudes toward diversity scale (ATDS). *Educational and Psychological Measurement*, 56(2), 293-303. <https://doi.org/10.1177/0013164496056002010>
- NAAE. (2019). 2015-2019 Agriculture Teacher Supply and Demand Overview NAAE Region IV. <https://www.naae.org/teachag/2019%20Region%204.pdf>
- The National FFA Organization. (2019). Diversity and Inclusion. *FFA website*. <https://FFA.org/diversity-and-inclusion>
- Nederhof, A. J. (1985). Methods of coping with social desirability bias: a review. *European Journal of Social Psychology*, 15, 263-280.
- Olson, M. R. (1987). A Study of Gay and Lesbian Teachers. *Journal of Homosexuality*, 13(4), 73–81. https://doi.org/10.1300/J082v13n04_04
- Raja, S., & Stokes, J. P. (1998). Assessing attitudes toward lesbians and gay men: the modern homophobia scale. *Journal of Gay, Lesbian, and Bisexual Identity*. 3(2), 113-134. <https://doi.org/10.1023/A:1023244427281>
- Stephan, W. G., & Stephan, C. W. (1993). Cognition and affect in stereotyping: parallel interactive networks. In D. M. Mackie & D. L. Hamilton (Eds.), *Affect, cognition, and stereotyping: Interactive processes in group perception*. Academic Press, Inc.
- Stephan, W. G., & Stephan, C. W. (2000). An integrated threat theory of prejudice. In S. Oskamp (Ed.), *Reducing prejudice and discrimination* (pp. 23–45), Mahwah, NJ: Lawrence Erlbaum.
- Strahan, R., & Gerbasi, K. C. (1972). Short, homogenous versions of the Marlow-Crowne social desirability scale. *Journal of Clinical Psychology*, 28(2), 191-193. [https://doi.org/10.1002/1097-4679\(197204\)28:2](https://doi.org/10.1002/1097-4679(197204)28:2)
- Stripling, C. T., & Ricketts, J. C. (2016). Research priority 3: Sufficient scientific and professional workforce that addresses the challenges of the 21st century. In T. G. Roberts, A. Harder, and M. T. Brashears (Eds.), *American Association for Agricultural Education national research agenda: 2016-2020*. UF Department of Agricultural Education and Communication
- Tougas, F., Brown, R., Beaton, A. M., & Joly, S. (1995). Neosexism: Plus ça change, plus c'est pareil. *Personality and Social Psychology Bulletin*, 21(8), 842-849. <https://doi-org.proxy.lib.ohio-state.edu/10.1177/0146167295218007>