# Disparities in wellbeing and sense of belonging among queer affirming UPRRP students

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## INTRODUCTION

The UPR student body has witnessed various adverse circumstances in Puerto Rico. Compounded hurricanes, earthquakes, fiscal and political crises, and the COVID-19 pandemic have undoubtedly disrupted students' well-being and abilities to engage with university life. With growing concern over if these difficulties disproportionately affect vulnerable groups, particularly the queer community, we aim to identify potential disparities in the wellbeing and sense of belonging between heteronormative and queer-affirming UPRRP students.

## METHODS

A convivence sample of 750 students was recruited to complete an online questionnaire. However, 287 cases were eliminated due to missing data, survey errors, and multivariate outliers. Aside from sociodemographic query, the questionnaire tackled 10 needs measures. The database for the sample was created using SPSS v. 27 and Intellectus Statistics led MANOVA statistical analyses.

## RESULTS

**Table 1**

*Comparing average senses of wellbeing and university belonging between queer and cisheteronormative groups.*

| | Wellbeing | | Sense of belonging | |
|---|---|---|---|---|
| | $\bar{x}$ | SD | $\bar{x}$ | SD |
| Queer groups | 158.08 | 24.69 | 76.20 | 14.32 |
| Cisheteronormative groups | 169.95 | 27.3 | 79.37 | 16.32 |

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## SOCIODEMOGRAPHIC DATA

**Table 2**
*Description of participants' gender identity.*

| Gender identity | n | % |
|---|---|---|
| Woman | 327 | 62.88 |
| Man | 145 | 27.88 |
| Trans man | 1 | 0.19 |
| Non-binary | 11 | 2.12 |
| Queer | 16 | 3.08 |
| Other | 2 | .38 |

### AGE
Participants had an average age of 24.95 years. ($SD$ = 9.03, $SE_M$ = 0.40, Min = 17.00, Max = 77.00, $Mdn$ = 21.00).

**Table 3**
*Description of participants' sexual orientation.*

| Sexual orientation | n | % |
|---|---|---|
| Heterosexual | 330 | 63.46 |
| Gay | 24 | 4.62 |
| Lesbian | 17 | 3.27 |
| Bisexual | 59 | 11.35 |
| Pansexual | 23 | 4.42 |
| Other | 10 | 1.92 |

## MANOVA

A MANOVA was conducted to assess if there were significant differences in the linear combination of *Wellbeing* and *Sense of belonging* subscales between queer affirming and heteronormative participants, $F(9, 443) = 7.15$, $p < .001$, η2p = 0.13.

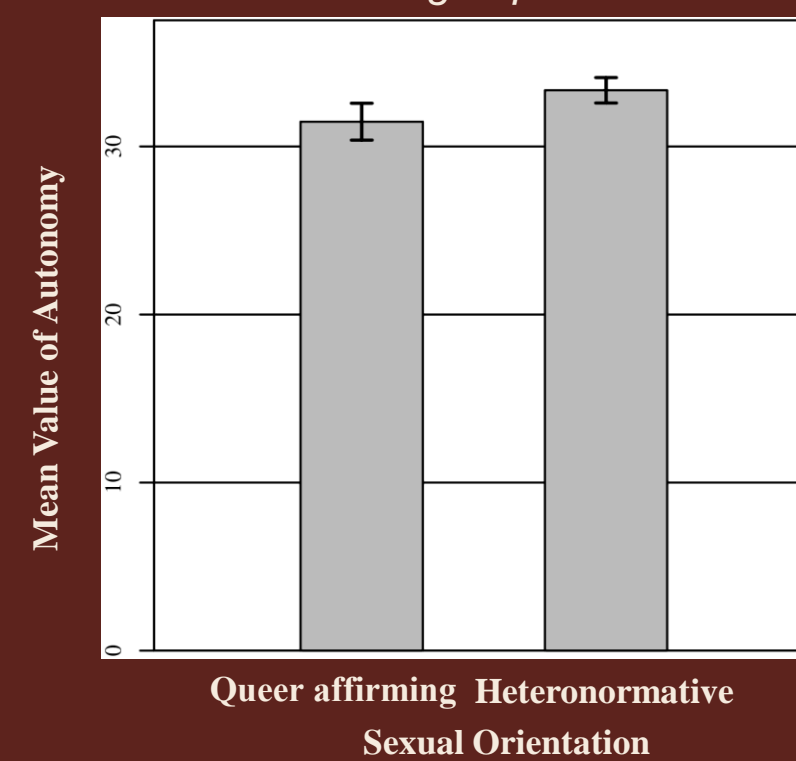| Variable | Piallai | $F$ | df | Residual $df$ | $p$ | $\eta_p^2$ |
|---|---|---|---|---|---|---|
| Sexual Orientation | 0.13 | 7.15 | 9 | 443 | <.001 | 0.13 |

## POSTHOC ANALYSES

### 1 WELLBEING

**Figure 1**
*Comparison of self-acceptance subscales between queer affirming and heteronormative groups.*
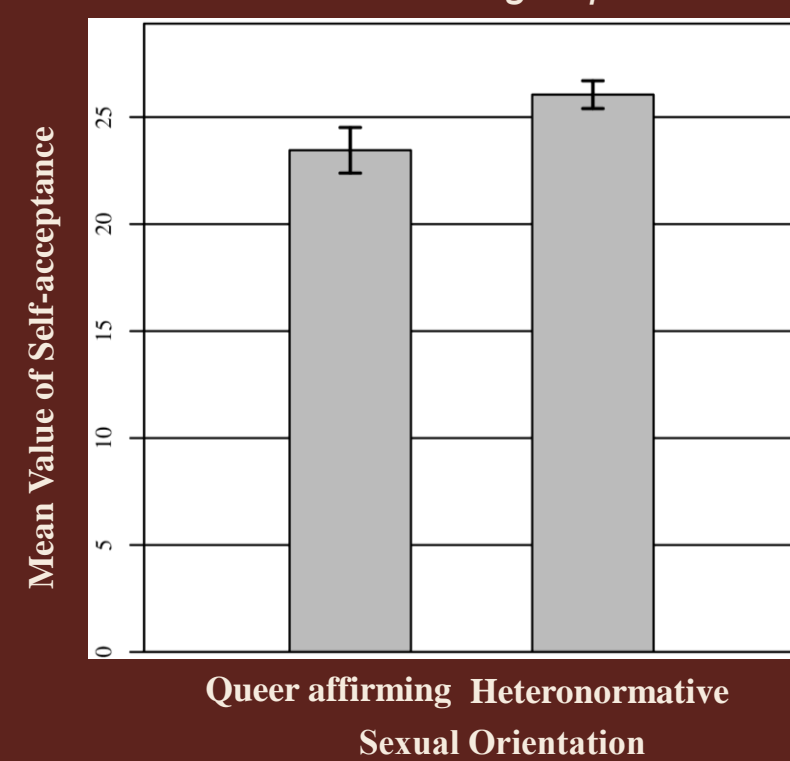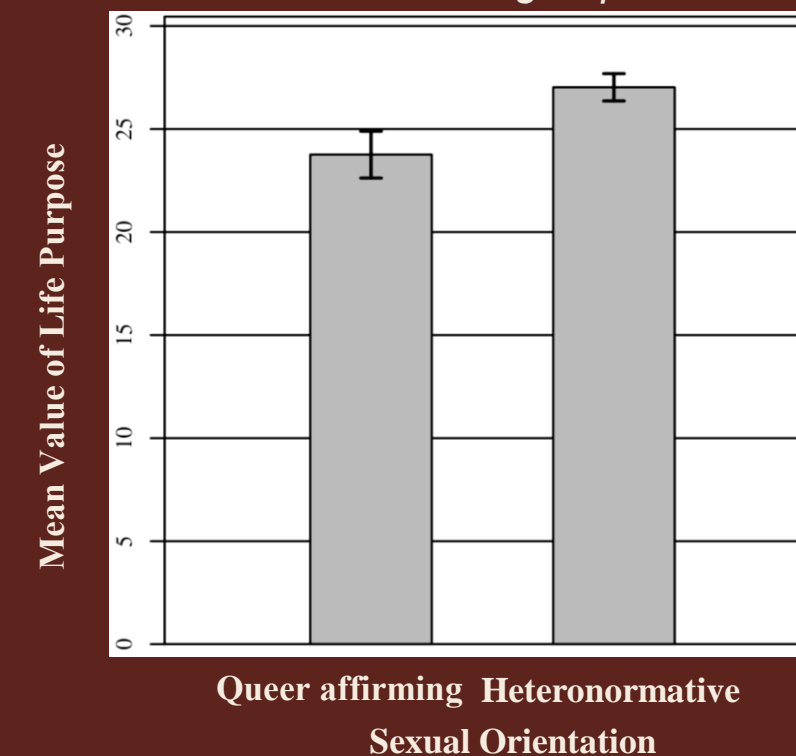


**Figure 2**
*Comparison of autonomy subscales between queer affirming and heteronormative groups.*



**Figure 3**
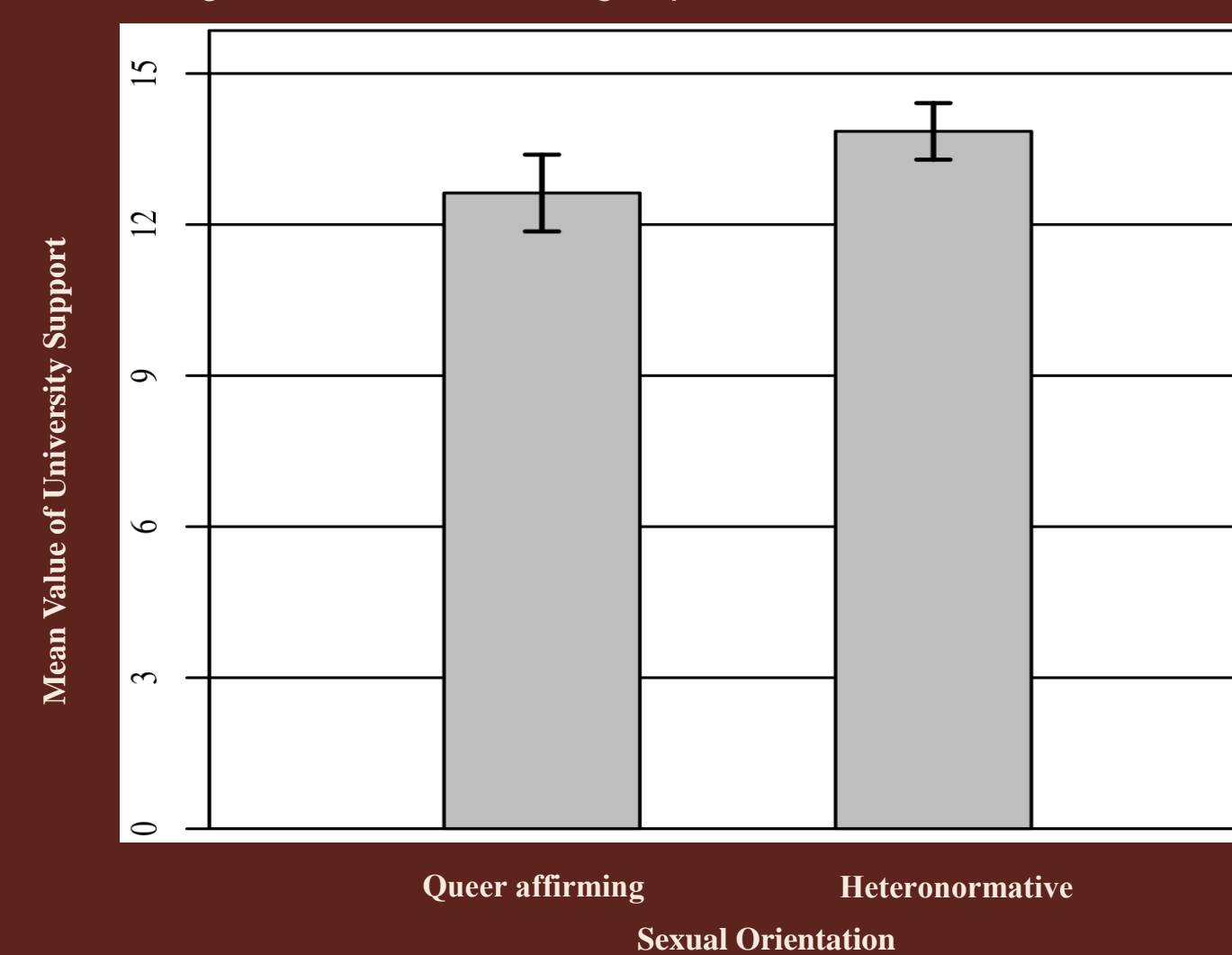*Comparison of setting domain subscales between queer affirming and heteronormative groups.*
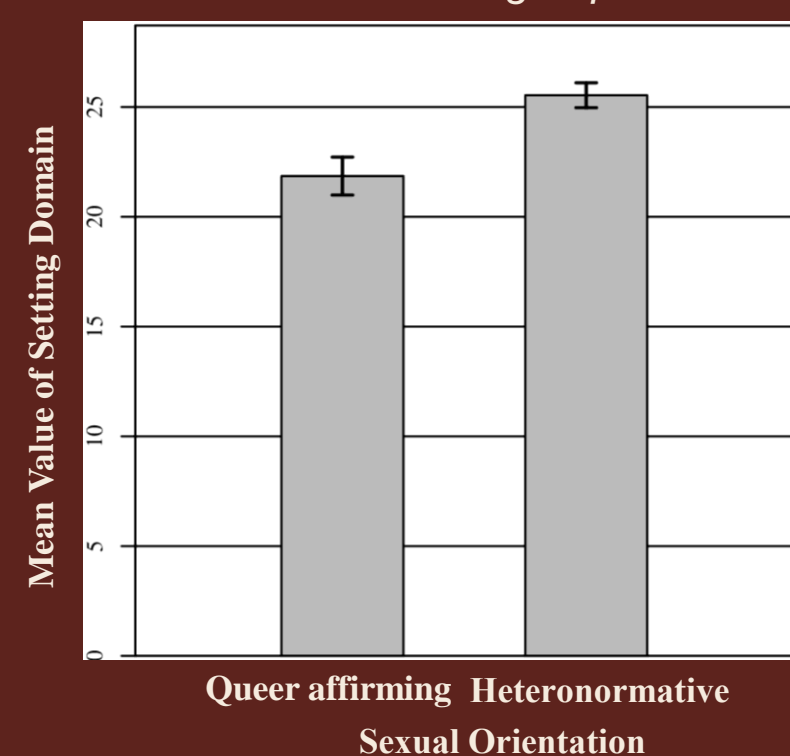


**Figure 4**
*Comparison of life purpose subscales between queer affirming and heteronormative groups.*



### 2 SENSE OF BELONGING

**Figure 5**
*Comparison of feelings of university support subscales between queer affirming and heteronormative groups.*



*Wellbeing* subscales of positive relationships ($p$ = .680) and personal growth ($p$ = .414) showed no significant difference between queer affirming and heteronormative participants. Likewise, *sense of belonging* subscales like academic belonging ($p$ = .147) and social belonging ($p$ = .120) showed no significant difference among these two groups.

## ASSUMPTIONS

**Figure 6**
*Chi-square Q-Q plot of model residuals to test multivariate normality.*
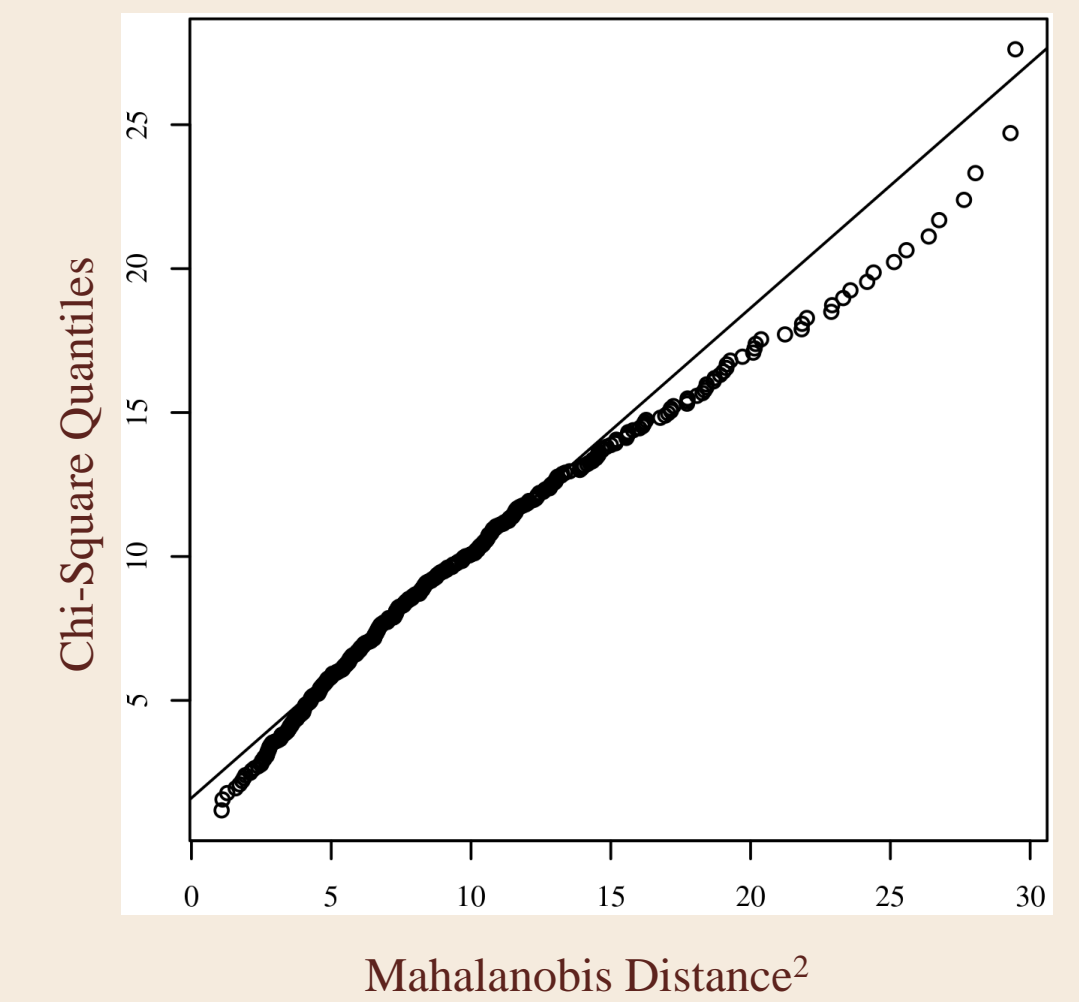


### Homogeneity of Covariances Matrices
$\chi^2(45) = 68.00$, $p = .015$

### Multivariate Outliers
Three observations were detected as outliers.

### Absence of Multicollinearity
All variable combinations had correlations <0.9, therefore, results are unlikely to be significantly influenced by multicollinearity.

## DISCUSSION

Results highlight how queer affirming students scored lower than their heteronormative counterparts in several of the subscales in the sense of belonging and wellbeing scales. This underlines the need for interventions and university policies and practices tailored to the queer community that address and combat disparities in overall wellbeing and sense of belonging among queer affirming student populations.

## LIMITATIONS

Limitations include a failure to meet the assumption of homogeneity of variance and significant differences in group sample sizes. These limitations should be recognized when interpreting the results and considered in the context of the research design.