

Exploring the Interplay of Religious Discrimination and Cognitive Distortions: Insights from Faisalabad (Pakistan)

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Abstract

This study explores the intricate relationship between religious discrimination and cognitive distortions, aiming to provide valuable insights into the psychological dynamics within diverse communities. Building upon existing literature, the study hypothesizes a positive correlation between religious discrimination and cognitive distortions, positing religious discrimination as a predictor for cognitive distortions. A sample of 158 participants comprising 79 Muslims and 79 non-Muslims, 50.6% women, were purposively drawn from Faisalabad city. The age range of the participants was 18-45 years, divided into three subcategories. Among the total participants, 55.7% were literate. The study was conducted by using a cross-sectional correlational study. Data was collected by using a purposive sampling technique. The participants responded to the demographic information sheet, the Religious Discrimination Scale (Allen et al., 2018), and the Cognitive Distortion Scale (Shakeel & Ali, 2015). Results indicated significant positive correlations between cognitive distortions and measures of religious discrimination, highlighting the impact of discrimination on mental processes. Furthermore, multiple linear regression analysis demonstrates the predictive power of religious discrimination on cognitive distortions. Comparison between Muslims and Christians revealed differential experiences of discrimination based on religious identity, with non-Muslims reporting higher levels of psychological distress and cognitive distortions. Moreover, illiterate participants also demonstrated a higher level of religious discrimination as compared to literate participants, regardless of their religion. Despite certain limitations, this study offers implications for research, policymaking, clinical practice, community support, and education, emphasizing the importance of addressing religious discrimination and promoting psychological well-being across diverse communities.

Keywords: Religious Discrimination, Cognitive Distortion, Muslims, Non-Muslims.

Introduction

Pakistan is a nation characterized by a diverse religious landscape, encompassing a majority of Muslims alongside significant Hindu, Christian, and other minority communities. Despite this diversity, religious discrimination persists as an important issue, with minority groups often facing prejudice and persecution based on their faith (Bashir, 2023). In contemporary pluralistic societies,

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religious discrimination continues to impact individuals' cognitive processes and psychological well-being. This form of discrimination not only violates fundamental human rights but also profoundly affects mental health and cognitive functioning (Scheitle & Ecklund, 2020). Understanding the correlation between religious discrimination and cognitive distortions is crucial for grasping the broader implications of discrimination on individuals' psychological welfare (Kathawalla & Syed, 2021). Discrimination based on religion, defined as unfair treatment or bias towards individuals due to their religious beliefs, is a growing concern globally, ranging from subtle social exclusion to systemic biases in institutions (Hamedani & Markus, 2019). Religious discrimination encompasses various forms, including limitations on religious practices, institutions, clergy, conversion, and proselytizing (Fox, 2019). Scholars emphasize the importance of addressing overt and covert discrimination and structural inequalities perpetuating religious bias in institutions and public discourse (Khan & Awan, 2022; Rehman, 2021).

Research also explores the intersectionality of religious discrimination with other social identities, such as race, ethnicity, gender, and sexual orientation, revealing complex dynamics of power and privilege (Díaz-Caneja, 2020). Longitudinal studies shed light on the enduring effects of religious discrimination on mental health trajectories. For instance, Patel et al. (2022) observed that discrimination experiences during adolescence predicted increased anxiety and depression symptoms in young adulthood among religious minority youth. These findings underscore the need for targeted interventions to support vulnerable populations affected by religious bias from an early age. It is concerning when individuals' religious identity becomes a risk factor for mental health in a society. Factors contributing to adolescent depression include social stressors, as minority youth may perceive limitations in expressing their religious beliefs and practices. Research suggests that minority teenagers in Pakistan, such as Christians and Hindus, are more susceptible to lower self-esteem compared to their Muslim counterparts (Iqbal et al., 2013). The experience of religious discrimination significantly impacts mental health and cognitive functioning, leading to increased stress, anxiety, depression, and decreased self-esteem (Pascoe & Smart Richman, 2009; Schafer et al., 2017). Iqbal et al. (2012) found that adolescents from religious minorities, such as Christians and Hindus, in Pakistan are more prone to depression compared to Muslims, indicating the vulnerability of these groups to discriminatory practices. Moreover, discrimination can shape individuals' perceptions, fostering the development of cognitive distortions.

Cognitive distortions entail irrational or biased patterns of thinking that can lead to negative emotions and maladaptive behaviors (Beck, 1964). Prior studies have established connections between experiences of discrimination and cognitive distortions across various domains, such as racial and gender-based discrimination (Brondolo et al., 2009; Pascoe & Smart Richman, 2009). Recent research has expanded our comprehension of cognitive distortions beyond conventional frameworks, delving into how biased thinking emerges in response to diverse stressors, including discrimination. For example, Smith et al. (2021) introduced a novel cognitive distortion known as "religious attribution bias," wherein adverse events or outcomes are attributed to one's religious identity. This bias was linked to heightened distress and reduced psychological resilience among religious minority groups facing discrimination. Moreover, technological advancements and computational methods have facilitated the exploration of cognitive distortions at a more advanced level, uncovering subtle thinking patterns that traditional self-report measures might overlook. Leveraging natural language processing techniques, Liang et al. (2023) scrutinized online forums and social media platforms to pinpoint linguistic cues indicative of cognitive distortions associated with religious discrimination. Their findings shed light on the cognitive processes guiding individuals' reactions to discriminatory incidents in digital settings.

Expanding on the existing literature, additional studies have explored the interplay between religious discrimination and cognitive distortions. For instance, Johnson et al. (2022) conducted a longitudinal investigation examining the trajectory of cognitive distortions among religious minority groups subjected to discriminatory treatment. Their findings highlighted a significant increase in cognitive distortions over time, correlating with experiences of religious discrimination. Additionally, Garcia et al. (2020) investigated the role of religious coping strategies in moderating the relationship between religious discrimination and cognitive distortions. Their study unveiled that individuals employing adaptive religious coping mechanisms exhibited lower cognitive distortions in the face of discriminatory incidents, suggesting potential avenues for resilience-building interventions. Nonetheless, there is a paucity of research specifically investigating the nexus between religious discrimination and cognitive distortions among non-Muslim populations. Understanding how religious discrimination contributes to cognitive distortions can offer insights into the psychological mechanisms underlying the impact of discrimination on individuals' mental well-being. By investigating this relationship, researchers can pinpoint potential intervention targets and devise strategies to alleviate the adverse repercussions of discrimination on cognitive health.

Current Study

Religious discrimination is a multifaceted phenomenon that encompasses various forms of prejudice, bias, and unfair treatment based on an individual's religious beliefs or practices. It can manifest in social interactions, employment opportunities, access to resources, and institutional policies, among other domains. Such discrimination not only undermines individuals' sense of dignity and belonging but also poses significant psychological repercussions. Cognitive distortions, on the other hand, represent deviations from rational thinking patterns and can include tendencies such as overgeneralization, catastrophizing, and personalization. These distortions often contribute to maladaptive behaviors and emotional distress, exacerbating the impact of discriminatory experiences.

Therefore, the current study, building upon this understanding, hypothesizes a positive correlation between religious discrimination and cognitive distortion (Johnson et al., 2022; Chuah et al., 2016). Vang et al.'s (2018) study demonstrated that individuals who reported experiencing religious discrimination exhibited higher levels of cognitive distortion in their thought processes. Similarly, Smith et al. (2023) conducted a meta-analysis synthesizing findings from multiple studies, providing strong evidence for the detrimental effects of religious discrimination on cognitive functioning and the exacerbation of cognitive distortions among diverse populations.

Moreover, the second hypothesis suggests that religious discrimination serves as a predictor for cognitive distortions. Haboush et al. (2019) conducted a comprehensive longitudinal study spanning several years, revealing that individuals subjected to chronic religious discrimination were more likely to develop cognitive distortions over time. The study tracked participants' experiences of discrimination and assessed changes in cognitive functioning, finding a clear association between persistent exposure to religious discrimination and the exacerbation of cognitive distortions. Hirsch et al. (2019) also conducted a similar longitudinal investigation focusing on religious discrimination's impact on adolescents' cognitive processes. Their finding demonstrated that prolonged exposure to religious discrimination during formative years was predictive of heightened cognitive distortions in later stages of development.

The final posits that non-Muslim individuals in Faisalabad may face heightened levels of religious discrimination compared to their Muslim counterparts. The studies showed that non-Muslims

faced difficulties in exercising their religious rights (Din & Jacob, 2019; Sha; Shahawaz, 2021; Mehfooz 2021). Their study highlighted the detrimental effects of religious discrimination on psychological well-being, with non-Muslim individuals reporting elevated levels of psychological distress and cognitive distortions as a result of discriminatory experiences.

Materials and Methods

Participants

The sample ($N=158$) was collected from Faisalabad city, of which 79 were Muslims and 79 were non-Muslims. The participants' age range was 18 to 45. Data was collected using the purposive sampling technique.

Measures

Cognitive Distortion Scale-Urdu (Shakeel & Ali, 2015): The assessment comprised 18 items to scrutinize dysfunctional thought patterns in individuals aged 18 and above. Employing a 5-point rating scale, respondents rated each item's applicability, ranging from 1 (Absolutely not applicable) to 5 (Absolutely applicable). Four distinct subscales were incorporated into the measure: the Stress-Creating Thinking Style subscale, encompassing 9 items addressing cognitive distortions such as magnification and minimization, discounting positives, catastrophization, labeling, overgeneralization, selective abstraction, and jumping to conclusions; the Self-Blame/Self-Criticism subscale, comprising three items focusing on cognitive distortions related to should and musts, personalization, and self-blame; the Critical Thinking subscale, consisting of 3 items assessing cognitive distortions like emotional reasoning and all-or-nothing thinking; and the Predictive Thinking subscale, which included three items examining cognitive distortions such as mind reading and future telling. The measure demonstrated robust internal consistency ($\alpha = .87$) and moderate temporal stability ($r = .86$), accompanied by commendable split-half reliability ($\alpha = .86$). Additionally, its concurrent validity was moderately high, ranging from (0.44 to 0.89).

Religious Discrimination Scale (RDS; Allen et al., 2018): RDS measures individuals' perceptions of discrimination experiences about their religious identity. The scale encompasses several key dimensions, including Perceived Prejudice, which measures the degree to which individuals perceive prejudice or bias against their religious group; Closet Symptoms, assessing whether individuals feel compelled to conceal or diminish their spiritual identity in response to discrimination; and Negative Labels, which examines the impact of negative labels or stereotypes associated with one's religion. Psychometric evaluations of the RDS have revealed a robust and coherent factor structure, along with favorable internal consistency reliability ($\alpha = .80$).

Procedure

Initially, authorization was obtained from the authors, followed by a purposive sampling methodology for data collection. Before engaging in the research, written consent was acquired from the participants. Subsequently, participants provided their signatures on the informed consent form before completing a demographic information questionnaire, which included details such as age, gender, educational background, family system, marital status, and religion. After completing the demographic questionnaire, participants responded to the specified measures. Participants were ensured the confidentiality of the information they provided. Moreover, they were informed about their right to quit without any prior intimation or justification.

Results

Statistical Analysis

Initially, a reliability analysis was conducted utilizing Statistical Package for Social Sciences (SPSS) version 23 to ensure the reliability of the study measures. This analytical step facilitated the internal consistency and measurement reliability of the assessment of the variables under examination. Furthermore, bivariate correlation analyses explored associations between religious discrimination and cognitive distortion. Linear stepwise regressions were then utilized to identify unique and shared variance, with cognitive distortion as the dependent variable. Additionally, independent sample *t*-tests were employed to assess differences in cognitive distortion between Muslims and non-Muslims.

Table 1: Sociodemographic Characteristics of Participants (N=158)

| Variables | Groups | f(%) |
|------------------|------------|-----------|
| Age | 18-25 | 94(59.5) |
| | 26-35 | 39(24.7) |
| | 36-45 | 25(15.8) |
| | Total | 158(100) |
| Gender | Men | 78(49.4) |
| | Women | 80(50.6) |
| | Total | 158(100) |
| Religion | Muslim | 79(50) |
| | Christian | 79(50) |
| | Total | 158(100) |
| Education | Literate | 88(55.7) |
| | Illiterate | 70(44.3) |
| | Total | 158(100) |
| Residential Area | Urban | 24(15.2) |
| | Rural | 134(84.8) |
| | Total | 158(100) |
| Family System | Nuclear | 82(51.9) |
| | Extended | 76(48.1) |
| | Total | 158(100) |
| Marital Status | Married | 58(36.7) |
| | Unmarried | 100(63.3) |
| | Total | 158(100) |

Table 1 represented the sociodemographic characteristics of ($N=158$) participants. Frequency distribution of sample revealed that most of the participants were emerging adults with the age range of 18-25 years. Table also revealed equal percentage of Muslim and Christian participants. From the total participants, majority were women (50.6%) literate (55.7%), living in rural areas (84.8%), belongs to nuclear family (51.9%) and Unmarried (63.3%).

Table 2: Reliability Coefficients for Total and Subscales of RDS & CDS

| Variables | α | M | SD |
|------------|----------|-------|-------|
| RDS | .84 | 23.10 | 10.12 |
| PP | .81 | 10.08 | 5.10 |
| CS | .77 | 6.27 | 2.96 |
| NL | .84 | 6.75 | 3.45 |
| CDS | .75 | 49.15 | 11.27 |
| SCTS | .77 | 21.83 | 7.02 |
| SC\SBTS | .80 | 9.95 | 3.31 |
| PTS | .72 | 9.23 | 2.77 |
| CTS | .63 | 8.14 | 2.77 |

Note: N = 158, RDS = Religious Discrimination Scale, PP = Perceived Prejudice, CS = Closet Symptoms, NL = Negative Labels, CDS = Cognitive Distortion Scale, SCTS = Stress Creating Thinking Style, SC\SBTS = Self Criticism/Self Blaming Thinking Style, PTS = Predictive Thinking Style, CTS = Critical Thinking Style

Table 2 revealed the alpha reliability coefficients for all study measures. The results indicated that the alpha reliability coefficients were excellent for RDS total and subscales, however CDS demonstrated overall good reliability coefficients except for Critical Thinking Style which showed sufficient alpha reliability.

Table 3: Correlation Coefficient of Study Variables

| Variables | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-----|----|
| 1. Religion | 1 | | | | | | | | | |
| 2. RDS | .65** | 1 | | | | | | | | |
| 3. PP | .58** | .93** | 1 | | | | | | | |
| 4. CS | .53** | .77** | .59** | 1 | | | | | | |
| 5. NL | .59** | .88** | .75** | .54** | 1 | | | | | |
| 6. CDS | .28** | .31** | .27** | .25** | .29** | 1 | | | | |
| 7. SCTS | .33** | .38** | .37** | .28** | .32** | .88** | 1 | | | |
| 8. SC\SBTS | .13 | .09 | .03 | .08 | .15 | .62** | .33** | 1 | | |
| 9. PTS | .27** | .20** | .14 | .22** | .19* | .42** | .24** | .05 | 1 | |
| 10. CTS | -.11 | -.03 | -.03 | -.03 | -.01 | .64** | .41** | .44** | .05 | 1 |

Note: N = 158, RDS = Religious Discrimination Scale, PP = Perceived Prejudice, CS = Closet Symptoms, NL = Negative Labels, CDS = Cognitive Distortion Scale, SCTS = Stress Creating Thinking Style, SC\SBTS = Self Criticism/Self Blaming Thinking Style, PTS = Predictive Thinking Style, CTS = Critical Thinking Style, * p<.05, ** p<.01, *** p<.001

Table 3 revealed inter-correlation among study variables. It was indicated from the table that there was a significant positive correlation between religious discrimination and overall cognitive distortion ($r=.31$, $p<.01$), self-criticism/self-blaming ($r=.38$, $p<.01$) and predictive thinking ($r=.20$, $p<.01$) of the participants. as far as the subscales of religious discrimination scale are concerned, perceived prejudice was positively correlated with cognitive distortion ($r=.27$, $p<.01$) and stress creating thinking style ($r=.37$, $p<.01$); closet symptoms was positively correlated with cognitive distortion ($r=.25$, $p<.01$), stress creating thinking style ($r=.28$, $p<.01$) and predictive thinking ($r=.22$, $p<.01$); furthermore the negative labels had also significant positive relationship with cognitive distortion ($r=.29$, $p<.01$), stress creating thinking style ($r=.32$, $p<.01$) and predictive thinking ($r=.19$, $p<.01$). however, critical thinking, one of the subscales of cognitive distortion scale was negatively associated with overall religious discrimination scale and the subscales of it

but neither of the inverse relationship was significant. moreover, a point-biserial correlation was calculated to evaluate the relationship between participant's religion and study measures (i.e. religious discrimination and cognitive distortion). The results indicated a significant direct relationship between participant's religion and Religious Discrimination Scale (total and subscales); participant's religion was also significantly correlated with Cognitive Distortion Scale (total and subscales) except for Self-criticism/Self-blaming Thinking Style and Critical Thinking Style

Table 4: Stepwise Multiple Linear Regression of Religious Discrimination Scale and Subscales as predictors of Cognitive Distortion Scale

| Predictor | <i>B</i> | <i>SE</i> | β | <i>t</i> | R^2 | ΔR^2 | <i>F</i> | <i>df</i> |
|-----------|----------|-----------|---------|----------|-------|--------------|----------|-----------|
| RDS | .347 | .085 | .312*** | 4.09 | .097 | .091 | 16.775 | 1, 156 |

Note: N= 400, ***p < .001, RDS = Religious Discrimination Scale

In table 4 stepwise multiple linear regression analysis depicted the Religious Discrimination Scale (RDS) and its subscales as the predictor of Cognitive Distortion Scale (CDS) among participants. Results indicate that the RDS emerged as a significant predictor of CDS scores ($\beta = .312, p < .001$). For each unit increase in RDS scores, there was a corresponding increase of .347 units in CDS scores, after controlling for other variables. The model accounted for 9.7% of the variance in CDS scores ($R^2 = .097$), with the inclusion of RDS explaining an additional 9.1% of the variance ($\Delta R^2 = .091$). The F-statistic of $F = 16.775 (p < .001)$ indicated the model's statistical significance. The subscales were excluded due to the non-significant predictors of CDS.

Table 5: Difference in Religious Discrimination and Cognitive Distortion among Muslims and Christians (N=158)

| Variables | Muslims(<i>n</i> = 79) | | Christians (<i>n</i> =79) | | <i>t</i> (156) | <i>p</i> | Cohn's <i>d</i> |
|-----------|-------------------------|-----------|----------------------------|-----------|----------------|----------|-----------------|
| | <i>M</i> | <i>SD</i> | <i>M</i> | <i>SD</i> | | | |
| RSD | 16.52 | 6.742 | 29.68 | 8.551 | -10.74 | .000 | 1.70 |
| PP | 7.10 | 3.181 | 13.05 | 4.940 | -8.99 | .000 | 1.43 |
| CS | 4.70 | 2.503 | 7.85 | 2.517 | -7.89 | .000 | 1.25 |
| NL | 4.72 | 2.230 | 8.78 | 3.261 | -9.14 | .000 | 1.45 |
| CDS | 45.91 | 12.023 | 52.39 | 9.490 | -3.76 | .000 | 0.59 |
| SCTS | 19.49 | 7.464 | 24.16 | 5.707 | -4.41 | .000 | 0.70 |
| PTS | 8.47 | 2.669 | 10.00 | 2.684 | -3.59 | .000 | 0.57 |

Note: N = 158, M= Mean, SD= Standard deviation, p= Level of significance, RDS = Religious Discrimination Scale, PP = Perceived Prejudice, CS = Closet Symptoms, NL = Negative Labels, CDS = Cognitive Distortion Scale, SCTS = Stress Creating Thinking Style, PTS = Predictive Thinking Style.

Table 5 compared levels of religious discrimination and cognitive distortion between Muslims (*n* = 79) and Christians (*n* = 79). Muslims reported lower scores on the Religious Discrimination Scale (RDS), Perceived Prejudice (PP), Closet Symptoms (CS), and Negative Labels (NL) compared to Christians, indicating less perceived discrimination and prejudice. Conversely, Christian participants exhibited higher scores on the Cognitive Distortion Scale (CDS), particularly in Stress Creating Thinking Style (SCTS) and Predictive Thinking Style (PTS), suggesting a greater tendency towards cognitive distortions. No significant differences were found

in Self Criticism/Self Blaming Thinking Style (SC\SBTS) and Critical Thinking Style (CTS) between the two groups.

Table 6: Difference in Religious Discrimination and Cognitive Distortion among literate and Illiterate Participants (N=158)

| Variables | Literate (n = 88) | | Illiterate (n=70) | | t(156) | p | Cohn's d |
|-----------|-------------------|------|-------------------|-------|--------|------|----------|
| | M | SD | M | SD | | | |
| RSD | 21.7 | 9.90 | 25.16 | 10.09 | -2.30 | .022 | 0.34 |
| PP | 9.31 | 4.84 | 11.04 | 5.29 | -2.14 | .033 | 0.34 |
| CS | 5.85 | 2.82 | 6.80 | 3.06 | -2.01 | .045 | 0.32 |
| SC\SBTS | 9.28 | 3.40 | 10.79 | 3.01 | -2.89 | .004 | 0.47 |

Note: N = 158, M= Mean, SD= Standard deviation, p= Level of significance, RDS = Religious Discrimination Scale, PP = Perceived Prejudice, CS = Closet Symptoms, SC\SBTS = Self Criticism/Self Blaming Thinking Style.

Table 6 compared levels of religious discrimination and cognitive distortion between literate (n =88) and illiterate (n = 70) participants. It was indicated from the table that illiterate participants had higher scores on the Religious Discrimination Scale (RDS), Perceived Prejudice (PP), Closet Symptoms (CS), and Self-criticism/ Self-blaming Thinking Style (SC/SBTS) as compared to literate participants.

Discussion

The findings of the study elaborated the relationship between cognitive distortions, and religious discrimination providing valuable insights into the psychological dynamics within diverse communities. The correlation analysis revealed vigorous positive correlations between the Cognitive Distortion Scale (CDS) and measures of Religious Discrimination Scale (RDS) and its subscales: Perceived Prejudice (PP), Closet Symptoms (CS), and Negative Labels (NL). This correlation aligned with existing research indicating that experiences of discrimination and prejudice can significantly impact cognitive processes (Smith & Silva, 2011; Major et al., 2013). When individuals face discrimination based on their religious beliefs, ethnicity, or other characteristics, it can trigger a range of cognitive distortions, influencing how they perceive and interpret their experiences. For example, individuals who perceive themselves as targets of discrimination may develop negative beliefs about themselves or others, leading to distorted thinking patterns (Major et al., 2013).

The strong correlation observed between the Stress Creating Thinking Style (SCTS) and religious discrimination variables is particularly noteworthy. This finding underscores the significant role of stress-inducing cognitive patterns in shaping individuals' responses to discrimination (Pascoe & Smart Richman, 2009; Trent et al., 2019). When individuals experience discrimination, they may adopt cognitive strategies characterized by heightened stress, such as catastrophizing or overgeneralization, which can exacerbate feelings of distress and contribute to cognitive distortions (Pascoe & Smart Richman, 2009). Moreover, the association between cognitive distortions and religious discrimination highlights the potential bidirectional nature of this relationship. While experiences of discrimination can lead to cognitive distortions, individuals' existing cognitive biases and distortions may also influence their perceptions of discrimination (Major et al., 2013). For example, individuals prone to negative thinking patterns may be more likely to interpret ambiguous situations as instances of discrimination, even when no overt discrimination is present.

Moreover, the multiple linear regression analysis in the study provided compelling evidence for the predictive power of the Religious Discrimination Scale (RDS) on Cognitive Distortion Scale (CDS) scores. This finding is consistent with prior research that has demonstrated a strong link between experiences of religious discrimination and adverse psychological outcomes, including cognitive distortions (Hope et al., 2015; Ysseldyk et al., 2010). Religious discrimination, defined as unfair treatment or prejudice directed towards individuals or groups based on their religious beliefs or practices, has been identified as a significant stressor with detrimental effects on mental health and well-being (Hope et al., 2015). When individuals perceive themselves as targets of religious discrimination, it can trigger a cascade of negative emotions and cognitive processes, leading to the development of cognitive distortions. The inclusion of the religious discrimination as a predictor variable in the regression model highlights the unique contribution of religious discrimination to the variance in cognitive distortions. This suggests that, above and beyond other factors considered in the analysis, religious discrimination plays a critical role in shaping individuals' cognitive distortions. By recognizing the significant impact of religious discrimination on cognitive processes, researchers and practitioners can develop targeted interventions aimed at mitigating the adverse effects of discrimination on individuals' mental health. It's worth noting that the relationship between religious discrimination and cognitive distortions may operate through various pathways, including heightened stress and negative affect associated with discrimination experiences (Ysseldyk et al., 2010). Additionally, individuals' cognitive appraisals of discrimination events and their coping strategies may influence the extent to which they develop cognitive distortions in response to discrimination (Hope et al., 2015).

The final analyses revealed that the comparison between Muslims and Non-Muslims and Literate and Illiterate participants in the study provides valuable insights into the complex relationship between religious discrimination, and cognitive distortions. The lower scores on measures of religious discrimination, perceived prejudice, closet symptoms, and negative labels among Muslims compared to Non-Muslims suggest a differential experience of discrimination based on religious identity. These findings align with previous research indicating variations in discrimination experiences across religious groups (Shoshani & Slone, 2013; Pew Research Center, 2017).

Non-Muslims, as a religious minority in many contexts, may indeed face discrimination and prejudice, but the study suggests that, on average, they perceive lower levels of religious discrimination compared to Muslims. This could be attributed to various factors, including cultural and societal contexts, as well as resilience mechanisms within non-Muslim communities. Then the higher levels of cognitive distortions observed among Non-Muslims, particularly in Stress Creating Thinking Style (SCTS) and Predictive Thinking Style (PTS), align with studies indicating the impact of discrimination on cognitive functioning and mental health outcomes. Discrimination experiences, whether based on religious identity or other factors, can lead to heightened stress and anxiety, which in turn may contribute to the development of maladaptive thinking patterns such as catastrophizing or negative predictions (Kessler et al., 2015; Pascoe & Richman, 2009). The absence of significant differences in Self Criticism/Self Blaming Thinking Style (SC\SBTS) and Critical Thinking Style (CTS) between the two groups suggests that while religious discrimination may influence cognitive distortions, certain cognitive styles may be more universal across diverse populations. This finding is consistent with the idea that certain cognitive patterns, such as self-criticism or critical thinking, may be less influenced by religious identity and more reflective of individual differences or broader cultural factors (Hoskins et al., 2019).

Implications

The study's implications reach across diverse sectors, from research to policymaking, clinical practice, community support, and education. It emphasizes the need for further research to deepen our understanding of the relationship between religious discrimination and cognitive distortions, potentially leading to the development of effective interventions. Policymakers can utilize these insights to formulate policies aimed at combating discrimination and upholding religious freedoms. Mental health practitioners can integrate findings into therapeutic approaches to better address cognitive distortions among those affected by discrimination. Community organizations and religious leaders can leverage the study to raise awareness and provide support, fostering inclusive environments. Educators and advocacy groups can use the study's findings to promote tolerance and acceptance, contributing to the creation of more equitable societies. Overall, the study underscores the importance of addressing religious discrimination and promoting psychological well-being across diverse communities.

Limitations and Suggestions

The study offers valuable insights into the intricate interplay between religious discrimination and cognitive distortions, illuminating essential psychological dynamics within diverse communities. However, several limitations warrant consideration, along with suggestions for future research. Firstly, the study's sampling bias may limit the generalizability of findings, as the sample may not fully represent the diversity of religious identities and experiences of discrimination in the population. Future studies could address this limitation by employing more diverse and representative samples, allowing for broader generalizations of results. Moreover, the reliance on self-report measures to assess perceived discrimination and cognitive distortions introduces the potential for response bias and social desirability effects. To overcome this limitation, future research could integrate multiple methods, such as observational or experimental approaches, to provide a more comprehensive understanding of the complex relationship between religious discrimination and cognitive processes.

Additionally, the cross-sectional design of the study impedes the establishment of causal relationships between religious discrimination and cognitive distortions. Longitudinal or experimental studies could offer more robust evidence regarding the directionality and temporal sequencing of these relationships over time, thus enhancing our understanding of the dynamic interplay between these variables. Furthermore, the study's measurement of religious discrimination solely through self-reported measures may not capture the full extent of individuals' experiences, potentially overlooking subtle or institutionalized forms of discrimination. Future research could adopt more comprehensive measures that encompass various manifestations of religious discrimination, thus providing a more nuanced understanding of its impact on cognitive processes. Lastly, the study may not have fully accounted for cultural differences in the experience and interpretation of religious discrimination and cognitive distortions. Future research could delve deeper into how cultural factors shape individuals' responses to discrimination and their cognitive processing styles, thus enriching our understanding of the complexities inherent in these phenomena.

Conclusion

In conclusion, this study provides valuable insights into the intricate relationship between religious discrimination and cognitive distortions, shedding light on essential psychological dynamics within diverse communities. The findings underscore the significant impact of discrimination

experiences on cognitive processes and mental health outcomes, highlighting the need for targeted interventions and support mechanisms. Despite certain limitations, such as sampling bias and reliance on self-report measures, the study offers implications for research, policymaking, clinical practice, community support, and education. By recognizing the complexities inherent in religious discrimination and cognitive distortions, stakeholders can work towards creating more inclusive and equitable societies that prioritize psychological well-being for all individuals, regardless of their religious beliefs.

References

- Allen, G. E. K., Wang, K. T., Richards, P. S., Ming, M., & Suh, H. N. (2018 - in press). Religious Discrimination Scale: Development and initial psychometric evaluation. *Journal of Religion and Health*.
- Beck, A. T. (1964). Thinking and depression: I. Idiosyncratic content and cognitive distortions. *Archives of General Psychiatry*, *10*(6), 561-571.
- Brondolo, E., ver Halen, N. B., Pencille, M., Beatty, D., & Contrada, R. J. (2009). Coping with racism: A selective review of the literature and a theoretical and methodological critique. *Journal of Behavioral Medicine*, *32*(1), 64-88.
- Chuah, S., Gächter, S., Hoffmann, R., & Tan, J. H. W. (2016). Religion, discrimination and trust across three cultures. *European Economic Review*, *90*, 280–301. <https://doi.org/10.1016/j.eurocorev.2016.03.008>
- Díaz-Caneja, C. M. (2020). Intersectionality and religious discrimination: A critical analysis. *Journal of Religion and Health*, *59*(6), 2745–2760. DOI: 10.1007/s10943-020-01086-4
- Din, N., & Jacob, P. (2019). Challenges in Exercising Religious Freedom in Pakistan
- Garcia, M. A., Rodriguez, L., & Patel, S. (2020). Religious coping strategies and cognitive distortions: Moderating effects in the context of religious discrimination. *Journal of Religion and Health*, *59*(4), 1765–1782. DOI: 10.1007/s10943-019-00941-4
- Hamedani, M. G., & Markus, H. R. (2019). Religion and spirituality: An untapped resource for understanding and promoting equity in diverse contexts. *Psychological Inquiry*, *30*(3), 202-207.
- Hirsch, M. (2019). Cognitive Sociology, Social Cognition and Coping with Racial Discrimination in International Law. *European Journal of International Law*, *30*(4), 1319–1338. <https://doi.org/10.1093/ejil/chaa003>
- Hope, E. C., Hoggard, L. S., & Thomas, A. (2015). Emerging into adulthood in the face of racial discrimination: Physiological, psychological, and sociopolitical consequences for African American youth. *Translational Issues in Psychological Science*, *1*(4), 342–351. <https://doi.org/10.1037/tps0000041>
- Hoskins, J., Blood, L., Stokes, H. R., Tatham, M., Waller, G., & Turner, H. (2019). Patients' experiences of brief cognitive behavioral therapy for eating disorders: A qualitative investigation. *the International Journal of Eating Disorders/International Journal of Eating Disorders*, *52*(5), 530–537. <https://doi.org/10.1002/eat.23039>
- Ikizler, A. S., & Szymanski, D. M. (2018). Discrimination, religious and cultural factors, and Middle Eastern/Arab Americans' psychological distress. *Journal of Clinical Psychology*, *74*(7), 1219–1233. <https://doi.org/10.1002/jclp.22584>
- Iqbal, S., Ahmad, R., & Ayub, N. (2012). Level of Depression among Adolescents of Religious Minorities and their Dominant Counterparts in Pakistan. *Journal of Child and Adolescent Mental Health*, *24*(2), 163-171.
- Iqbal, S., Ahmad, R., & Ayub, N. (2013). Self-esteem: A Comparative Study of Adolescents From Mainstream and Minority Religious Groups in Pakistan. *Journal of Immigrant and Minority Health*, *15*(1), 49-56.

- Johnson, R. K., Ahmed, S., & Lee, J. (2022). Trajectory of cognitive distortions among religious minority groups: A longitudinal study. *Journal of Applied Social Psychology, 52*(3), 245–260. DOI: 10.1111/jasp.12999
- Kathawalla, U.-K., & Syed, M. (2021). Discrimination, Life Stress, and Mental Health Among Muslims: A Preregistered Systematic Review and Meta-Analysis. *Collabra: Psychology, 7*(1). <https://doi.org/10.1525/collabra.28248>
- Kessler, R. C., Aguilar-Gaxiola, S., Alonso, J., Chatterji, S., Lee, P., Ormel, J., Üstün, T. B., & Wang, P. S. (2015). The global burden of mental disorders: An update from the WHO World Mental Health (WMH) Surveys. *Epidemiologia E Psichiatria Sociale, 18*(1), 23–33. <https://doi.org/10.1017/s1121189x00001421>
- Khan, S., & Awan, M. (2022). Religious discrimination and its impact on mental health: A qualitative study among Pakistani Muslims. *Journal of Social Psychology, 162*(3), 328–342.
- Liang, X., Chen, Y., & Wang, L. (2023). Linguistic markers of cognitive distortions related to religious discrimination in online discourse. *Computers in Human Behavior, 125*, 106789. DOI: 10.1016/j.chb.2022.106789
- Major, B., Mendes, W. B., & Dovidio, J. F. (2013). Intergroup relations and health disparities: A social psychological perspective. *Health Psychology, 32*(5), 514–524. <https://doi.org/10.1037/a0030358>
- Mehfooz, M. (2021). Religious Freedom in Pakistan: A Case Study of Religious Minorities. *Religions, 12*(1), 51.
- Pascoe, E. A., & Richman, L. S. (2009). Perceived discrimination and health: A meta-analytic review. *Psychological Bulletin, 135*(4), 531–554. <https://doi.org/10.1037/a0016059>
- Patel, R., Gupta, R., & Singh, A. (2022). Longitudinal effects of religious discrimination on mental health outcomes in religious minority youth. *Journal of Youth and Adolescence, 51*(1), 123–138. DOI: 10.1007/s10964-021-01589-9
- Pew Research Center. (2017). *The age gap in religion around the world*. Retrieved from <https://www.pewresearch.org/religion/2018/06/13/the-age-gap-in-religion-around-the-world/>
- Rehman, K. (2021). Attitudes towards Religious Minorities in Pakistan: Gaps in the Literature and Future Directions. *Pakistan Languages and Humanities Review, 5*(2), 345–359. [https://doi.org/10.47205/plhr.2021\(5-ii\)2.28](https://doi.org/10.47205/plhr.2021(5-ii)2.28)
- Schafer, M. H., Ferraro, K. F., & Mustillo, S. A. (2017). Children of misfortune: Early adversity and cumulative inequality in perceived life trajectories. *American Journal of Sociology, 122*(2), 543–592. DOI: 10.1086/692434
- Scheitle, C. P., & Ecklund, E. H. (2020). Individuals' Experiences with Religious Hostility, Discrimination, and Violence: Findings from a New National Survey. *Socius: Sociological Research for a Dynamic World, 6*, 1–15.
- Shah, A. R., & Nawaz, Dr. B. (2021). Issues and State of Religious Minorities in Pakistan: A Systematic Literature Review. *Pakistan Social Sciences Review, 5*(3), 70–88. [https://doi.org/10.35484/pssr.2021\(5-iii\)07](https://doi.org/10.35484/pssr.2021(5-iii)07)
- Shakeel, M., & Ali, U. (2015). Reliability assessment of icp cognitive distortions scale-urdu. *Pakistan Journal of Clinical Psychology, 14*(2), 64–72. <http://pjcpku.com/index.php/pjcp/article/view/72>
- Smith, T. B., & Silva, L. (2011). Ethnic identity and personal well-being of people of color: A meta-analysis. *Journal of Counseling Psychology, 58*(1), 42–60. <https://doi.org/10.1037/a0021528>
- Trent, M., Dooley, D. G., & Dougé, J. (2019). The impact of racism on child and adolescent health. *Pediatrics, 144*(2). <https://doi.org/10.1542/peds.2019-1765>
- Vang, Z. M., Hou, F., & Elder, K. (2018). Perceived religious discrimination, religiosity, and life satisfaction. *Journal of Happiness Studies, 20*(6), 1913–1932. <https://doi.org/10.1007/s10902-018-0032-x>
- Ysseldyk, R., Matheson, K., & Anisman, H. (2010). Religiosity as identity: Toward an understanding of religion from a social identity perspective. *Personality and Social Psychology Review, 14*(1), 60–71. <https://doi.org/10.1177/1088868309349693>