The Psychological Basis for Religion
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Introduction

Religion has been an integral part of human lives from the earliest ancient civilizations up through modern day society. However, although around 84 percent of the world’s population is affiliated with a religion, it is still a hard concept to define (Hackett & McClendon, 2017). According to A Dictionary of Social Sciences, “religions are systems of beliefs, practice, and organization which shape and ethic manifest in the behavior of their adherents” and “religious beliefs are interpretations of immediate experience by reference to the ultimate structure of the universe, its centres of power and destiny” (Gould & Kolb, 1964). Thus, religion simultaneously shapes our behavior and allows us to interpret our world and the universe as a whole. The question then, is what has driven so many people around the world to their respective religions? Are there specific processes and phenomena that make us prone to believing in a higher power or adhering to a religious system? This paper does not focus on a specific religion or whether any beliefs are accurate, but instead delves into how and why people so often acquire religious beliefs and come to identify with a religion. Through various studies and theories I aim to show that religious beliefs, which people often shape their lives and values around, stem from many psychological sources that bias our minds to be more likely to believe in higher powers and partake in religion. These psychological influences can be categorized into either cognitive sources, which prompt our minds to look for patterns or explanations for supernatural experiences, or social sources, which can lead us to religion as a coping mechanism or a social norm.

Part 1: The Cognitive Basis for Religion

There are three cognitive sources for religious beliefs that could help explain why people tend to adhere to religious systems. First, peo-
people often feel a lack of control in life and are motivated to gain control through an understanding of their experiences. In other words, as we strive to understand the complex world around us, cognitive tendencies may lead us to reach supernatural or mystical conclusions that provide explanations. Researchers conducted a series of experiments to understand how a lack of control affects human life and how people attempt to gain control perceptually through patterns. In one experiment, the researchers reduced the sense of control participants felt by giving them random performance feedback, and found that those individuals had a greater need to perceive patterns, according to the Personal Need for Structure Scale. In another experiment, they had participants recall a situation where they experienced either a lack of control or full control, and then they tested if participants would perceive connections between unrelated events, such as knocking on wood before a successful meeting. The study found that participants who had recalled a lack-of-control situation perceived a greater connection between the two unrelated events, suggesting that when people feel a lack of control their beliefs may become more superstitious. These experiments, along with four others conducted, demonstrated that a loss of control led to participants wanting more structure and perceiving patterns where they did not necessarily exist (Whitson & Galinsky, 2008). Relating this back to religious beliefs, it is likely that as people try to understand and navigate the world around them they feel a lack of control and then begin to perceive patterns in the environment, which may lead to supernatural or religious conclusions. For example, if we feel helpless in a relationship conflict and then something unexpected fixes things, we may link it to a supernatural explanation, thus showing our bias to believe in a higher power.

A second cognitive source for religious beliefs is the cognitive advantages they provide, such as protection against anxiety and cognitive errors. Through two research studies, Inzlicht et al. (2009) explored the relationship between brain activity and religious conviction. In the first study, participants completed scales measuring their need for cog-
native closure, behavioral inhibition, behavioral activation, self-esteem, and their Religious Zeal. Then they completed a standard Stroop task, in which participants saw the names of colors in different colored fonts and had to press a button corresponding to the font color. At the same time EEGs were recorded to measure error-related negativity (ERN), a negative voltage reflecting uncertainty in the anterior cingulate cortex (ACC). The results showed that a greater score of Religious Zeal was correlated with less ERN activity when errors were made on the Stroop test, meaning participants were more calm and suffered from less anxiety when making mistakes. The second study was similar except the researchers measured belief in God on a five point scale instead of Religious Zeal. This study found that a greater belief in God was correlated with less ACC activity and more behavioral accuracy (Inzlicht, McGregor, Hirsh, & Nash, 2009). These studies suggest that having religious beliefs is related to less neural activity concerning errors and anxiety, providing a protective reason for why people adopt religious beliefs. Hence, once we have some sort of religious belief it seems natural to sustain it, as it provides advantages while in conflict.

Religion is therefore linked to cognition in both why we may look for supernatural patterns and how religion is mentally beneficial. A third cognitive influence for religion is feelings of spirituality. In her book My Stroke of Insight, neuroscientist Jill Bolte Taylor details her experience with a massive stroke that severely affected and impaired the left hemisphere of her brain, which had many repercussions, including communication problems and difficulty in completing multiple tasks. Taylor also experienced an inability to perceive physical boundaries between her and the world around her, and she details a sense of belonging and unity with the universe (Taylor, 2011). She often describes her experience as one of calmness and Nirvana, a Buddhist state of neither suffering nor desire (Cambridge Dictionary). This example of a neuroscientist proclaiming a link between a cognitive incident, a stroke debilitating her brain's left hemisphere, with a spiritual experience, Nirvana, suggests a connection
between our brain activity and what we perceive as religious experience.

In another study on religious experiences, researchers used fMRI scans on 19 young adult Mormons during religious stimuli such as prayer and scripture reading. Researchers compared the scans when each participant felt a strong versus a weak religious experience, and found that during strong experiences the scans showed greater activity in the bilateral nucleus accumbens, ventromedial prefrontal cortex, and frontal attentional regions, which are associated with rewards and attention (Ferguson et al., 2018). Similar to Taylor’s account of her stroke, this study shows a correlation between neural activity and religious experiences, suggesting that cognitive experiences serve as a strong basis for religious belief. This may be through cognitive experiences creating visions or emotions which we interpret as spiritual experiences during religious rituals that strengthen pre-existing beliefs.

One important thing to note however, is although studies show a strong link between religious experiences and cognitive activity, there is not necessarily a uniform cognitive reaction, and different practices may invoke different brain patterns. For example, in a 1999 study on the practice of Yoga Nidra, which involves tasks of guided imagery, PET scans revealed increased activity in brain systems linked to imagery such as the supplementary motor area, the left hemisphere, and the parietal lobe area. Alternatively, a 2000 study on Kundalini meditation using fMRI scans found that the brain activity patterns were connected to the contemplative nature of the meditation, activating neural structures involved in attention and arousal/autonomic control (Bulkeley, 2005). These findings show that the varying practices of different religions can invoke different states of consciousness and brain activity, thus emphasizing that since different cognitive experiences are evoked depending on the religion, perhaps people are driven to specific religions depending on their cognitive or mental need.

The various studies discussed thus far present a strong case for cognitive reasons for people to develop beliefs in higher beings and ties
with religious systems. Experiencing a lack of control is correlated with searching for patterns where they may not exist, religious beliefs are correlated with less anxiety, and cognitive activity is constantly linked with religious experiences. Humans are not purely driven by cognition however, and as social animals it is important to consider the social and adaptive psychological explanations for religious beliefs.

**Part 2: The Social Basis for Religion**

There are four social sources for religious beliefs that could help further explain the prevalence of spirituality in the world. First, religion has long been regarded as a way for people to cope with the society around them, filled with uncertainty and dangers. For example, one study by Park (2005) on 169 college students examined how religious meaning influenced coping following loss. Through various scales, researchers measured the religiosity, attribution of death to religious or nonreligious reasons, appraisal of disruption of religious beliefs due to the death, and discrepancy of the situation with global meanings of the participants. The study also looked at the adjustment of participants after the loss and if they used meaning-making coping. The results showed that religion was positively correlated with appraised discrepancies in beliefs and goals, attributions to God, meaning-making coping, and subjective well-being and stress-related growth. A deeper analysis found that for religious participants there was usually an initial distress and disruption in their global meaning system, but this tended to disappear (Park, 2005). This study shows how religion serves to help people cope with loss, find meaning in the negative events in their lives, and experience more well-being, highlighting religion as an effective coping tool. When people feel unable to deal with difficult issues in their lives and then perceive the benefits of religion regarding coping, this could cause an interest in spirituality.

Religion could also be a way for larger social groups to deal with difficulties such as inequality. One research study titled Economic Inequality, Relative Power, and Religiosity dived into this question by
combining cross-national survey data on religiosity with data on economic inequality, resulting in over 200,000 individual responses from 76 different societies. The results showed strong correlations between income inequality and religious indicators, such as percent who identify themselves as religious, percent who believe in an afterlife, and percent who take time to pray. The correlation coefficient between the Gini Index of Net Income Inequality and Importance of God to Life was actually 0.69, showing a large correlation between societies experiencing great inequality and societies with large percentages of people seeing God as important. By splitting data into income quintiles, researchers also found that economic inequality has larger effects on the religiosity of the rich versus the poor, supporting the relative power theory of religiosity which states that more inequality makes religion more attractive to the rich so they can disseminate religion among the other members of their society (Solt, Habel, & Grant, 2011). Thus, the social basis for religion cannot be underestimated, since the economic situation in a country and even the social status that people hold seems to influence their desire to be spiritual and turn to religion.

It seems people can use religion as a safety net to help cope with problems like personal loss and economic inequality, but a third social source for religion is seen in the correlation between religion and certain values, suggesting the possibility that religion is a way for people to cement their values as correct and explicitly express them as their way of life. One study looked at a sample of 1,523 Catholics, liberal Protestants, and conservative Protestants, and measured the church members’ level of activity within their church. The study also looked at childhood religious socialization, family structure, localism, and eight different values towards social change. The results showed that among Catholics, views against abortion and extramarital sex were greatly correlated with high church involvement, as well as with higher socioeconomic status. Among Protestants however, civil liberties were much more related to church involvement (Roof & Hoge, 1980). This shows a key link between social
values and religiosity, suggesting a correlation between a church’s support of one’s values and one’s subsequent involvement.

A fourth social source for religious beliefs is childhood socialization and the influence of parents on religiosity. After all, a crucial reason for faith and participation in a certain religious system could be being raised in a family that taught those beliefs and took their children to worship. A recent study focused on the United States by the Pew Research Center found interesting results concerning this phenomena. Their findings showed that around 80 percent of those who reported being raised exclusively by Protestants now identify with Protestantism and roughly 60 percent of those raised exclusively by Catholics now identify with Catholicism. Additionally, almost two-thirds of those who were raised by two people without a religious affiliation still remain unaffiliated. Having said this, the results were less straightforward among people who were raised in mixed-religion homes. For example, those raised by one Catholic and one unaffiliated parent are now divided, with around 32 percent identifying as Catholic, 42 percent identifying as no affiliation, and 20 percent identifying as Protestant. Regardless, this study showed a strong correlation between the religion that parents followed with the religion their children went on to follow when both parents were of the same religion (Pew Research Center, 2016). When considering the social basis for religion then, it is important to not only think of larger societal factors such as the inequality in a country, but also the pressures that may come from within the crucial social group that is a family.

It now seems more reasonable for 84 percent of the world to be affiliated with a religion of some sort, when there are so many cognitive and social reasons which bias people to look for religion. Religion can calm anxiety, provide patterns when faced with uncertainty, help us cope with loss or inequality, and present a structured framework for our values. Yet we still lack a psychological explanation for the 16 percent of the world not affiliated with any specific religion. According to Dr. Catherine Caldwell-Harris at Boston University, the literature on this topic suggests
there are distinct personality styles associated with non-believers, such as being slightly less social, less conformist, and more individualistic. They also tend to be more focused on present moral concerns and prefer logic and rationality (Caldwell-Harris, 2012). This shows that just like all the reasons discussed for why people search for a higher power and religion, innate cognitive and personality traits can also bias people to turn away from or reject religion. A study on atheism looked at a four-language web-based questionnaire and found that atheism is more common among people whose social obligations are weak, perhaps explaining secularization in industrial nations due to declining social obligations (Bainbridge, 2005). It follows then that just like with religious people, cognitive and social factors can impact the tendency of others to be non-religious. In other words, factors such as having a more rational personality or living in a less conformist society can prompt non-religiosity.

**Conclusion**

Taking a step back from all the studies presented brings us to the initial hypothesis that the religious beliefs the majority of the world hold stem from cognitive and social psychological sources. If we look at a young child learning about the world, they may face social pressures from family to adopt a certain religion. They may look for patterns in their environment in a hope to gain control of their life and reach supernatural conclusions. As they grow older, they may face loss or troubles that make them want a religious system to provide comfort and explanations for negative events in their world. They may experience strange visions or surreal moments stemming from brain activity that lead to religious explanations or spiritual connections. A lot of events and influences in our world slowly push us in the direction of joining the masses that are part of religions and believing in a higher power. Religion appears as an almost logical next step for people at many points in their lives, providing comfort and answers to what our minds are naturally searching for.

Having said this, this paper has taken somewhat of a reduction-
ist stance, attempting to explain something as complex and personal as people’s religious beliefs or lack of religious beliefs through psychological studies and theories. It is clear that there is a lot more to religion and spirituality than brain activity, a need for social comfort, and personality traits, yet the findings discussed here are a good starting explanation for why humans as a whole consistently gravitate toward religion, regardless of ethnicity, culture, or social norms. Further potential topics to explore could include a deeper analysis of the current state of religion and psychological reasons for modern secularism, as well as a comparison of different religions and psychological comforts they each may provide.
References


