

Irreligiosity, Narcissism and Criminal Thinking in Criminals

Izza Mahfooz* & Iram Fatima

Institute of Applied Psychology, University of the Punjab, Lahore, Pakistan

An extensive scientific debate surrounds the construct of criminal thinking and its link with both religion and personality. The present study examined this link by stating the hypothesis that there is likely to be a positive relationship between irreligiosity, narcissism and criminal thinking. The study also tried to look at the potential relationship between irreligiosity and narcissism as predictors of criminal thinking. Using a convenience sampling approach, a sample of 60 convicts ($N=60$), including 30 men and 30 women, was recruited from the District Jail of Faisalabad. TCU criminal thinking scales, the nonreligious-nonspiritual scale, and short dark triad scale were used to measure criminal thinking, irreligiosity and narcissism, respectively. Results were analyzed with the help of SPSS. The findings of present study showed a positive association between narcissism and criminal thinking (subscales of personal irresponsibility, criminal rationalization and power orientation) in criminals. However, there was no empirically significant correlation between irreligiosity and criminal thinking in criminals. Despite several limitations, the current study effectively shed light on novel aspects of the link between religion and crime, as well as the influence of personality on the development of criminal minds.

Keywords: narcissism, irreligiosity, criminal thinking, criminals

For the last few decades, researchers have been trying to investigate the impact of religion on crime. The theories of criminology and social psychology assume a negative relationship between religiosity and criminality but this much assumed inverse relationship is yet to be understood and justified on empirical grounds. Therefore, there is a need to make an effort to contribute to the complex study of the religion-crime relationship with special reference to the Pakistani socio-cultural context. Criminal thinking is a well-established and perhaps the most significant predictor of criminal behavior, however, further research is required to fully understand the emergence of criminal thinking with reference to specific predicting variables (Walters, 2019). Walters (2009) operationally defined criminal thinking as “a set of thought processes that uniquely facilitate the development of anti-social, law-breaking and criminal behaviors”. The variable of criminal thinking is best defined as a thinking pattern that typically involves the thoughts and subsequent actions of violating, defying or breaking the certain rules and regulations that have been crafted by the governing bodies or the authorities.

The primary theoretical concept to understand the phenomenon of criminal thinking was proposed by differential association theory. It proposed that associations or interactions with criminal peer groups are the primary factor leading to criminal thinking and behavior (Sutherland, 1947; Sutherland et al., 1992). Additionally, neutralization theory by Sykes and Matza (1957) offers an understanding of criminal thinking as it proposes that criminals hold a

conventional perception of themselves rather than an anti-social perception while actively trying to rationalize and justify their criminal acts, this is also known as criminal rationalization. Additionally, another model proposes that criminal thinking is unorganized, subjective and illogical, demanding immediate gratification (Walters, 2001). It can be certainly concluded from these theoretical models that criminal thinking covers wide range of thought processes that need to be understood with reference to multiple variables.

Prior research has suggested that criminal thinking is influenced by a lack of religiosity or irreligiosity by indicating that non-believers are more likely to engage in criminal conduct than believers (Deuchar et al., 2016). Duwe and Johnson (2023) suggested that lack of religiosity was positively related to criminal thinking as all the major religions promote prosocial and crime free lifestyle. Irreligiosity can be defined as indifference, denial or hostility with respect to religion. Irreligiosity is a reaction or alienated response to one's established religion and is explained as a public opinion of having no religious moralities or a lack of religious faith (Saroglou, 2013). One of the most commonly known types of irreligiosity is Atheism; an atheist negates the idea and existence of God (Baggini, 2003; Eller, 2010). A related concept is agnosticism, an agnostic says that they are uncertain regarding the existence of God and believes that ascertaining the existence of God is beyond the capability of human intellect (Palmer, 2013). The current study particularly focused on measuring an atheistic approach to irreligiosity as the scale under use claims to measure atheistic tendencies with respect to the ideology of irreligiosity. People having no religious affiliation are found in every demographic domain but certain patterns stand out nonetheless. Overall, it has been reported that the number of people identifying with a religion is declining, especially in the West. In United States, approximately 76% of the people identified with a religion in 2014 as compared to 83% in 2007 (Pew Research Center, 2015). Similar pattern has been observed in Australia and United Kingdom (Australian Bureau of Statistics, 2022; Woodhead, 2016). Men are more likely to show lack of religiosity as 64% of them identify themselves as atheists and 63% as agnostics. Furthermore, in US, about 3 in 10 adults identify themselves as irreligious, agnostics, atheist, or "nothing in particular" (Pew Research Center, 2015, Smith, 2021).

Irrespective of global statistics of irreligiosity, the main concern of this study is to explain the phenomenon of irreligiosity in Pakistan, particularly among convicted criminals, in order to enable us to explore the religion-crime affiliation. Literature and statistics suggest that irreligiosity is present mainly among a minority of youth in Pakistan (Khan, 2017). According to a survey, approximately 2% of Pakistan's population identified themselves as non-religious (Gallup & Gillani, 2023). This study investigated how atheism and irreligiosity in Pakistan has affected the crime scenario and criminal thinking patterns with particular reference to the prison population.

The other variable of this study, narcissism, refers to self-assuredness, self-enhancement, dominance, low self-esteem and feelings of inadequacy. People with narcissistic tendencies are likely to react in an aggressive manner in situations they perceive as humiliating or socially rejecting (Miller et al., 2011). The diagnostic criteria of narcissistic personality disorder typically include an intense need for admiration and a severe lack of compassion that begins in early adulthood and is present in various contexts (APA, 2022). The empirical relevance of narcissism to criminal thinking remains largely unexplored despite the broad agreement on the well-established relationship between narcissism and crime. Research

suggests that narcissism can be a major contributor to criminal thinking when its clinical presentation is specifically pathological (Park & Colvin, 2014). The most intense manifestations of pathological narcissism often involve either a breakdown of the ego defenses which serve to control violent conduct or a combination of both ideal and actual response in which damage, destruction, domination, control or humiliation are among the various possibilities. This phenomenon is referred by Kohut as ‘narcissistic rage’ (Kohut, 1972). Narcissistic personality disorder has been widely accepted as an important explanatory factor in several high-profile criminal trials (Park & Colvin, 2014). Previous literature suggests a positive relationship between narcissistic tendencies and criminal conduct, violence and aggression, yet the literature particularly with reference to criminal thinking is scarce. Hence, this study was designed to explore irreligiosity and narcissistic tendencies as predictors of criminal thinking with particular reference to convicted criminals in Pakistan.

Objective of the Study

- To explore the relationship of irreligiosity and narcissism with criminal thinking in criminals.
- To explore irreligiosity and narcissism as predictors of criminal thinking in criminals.

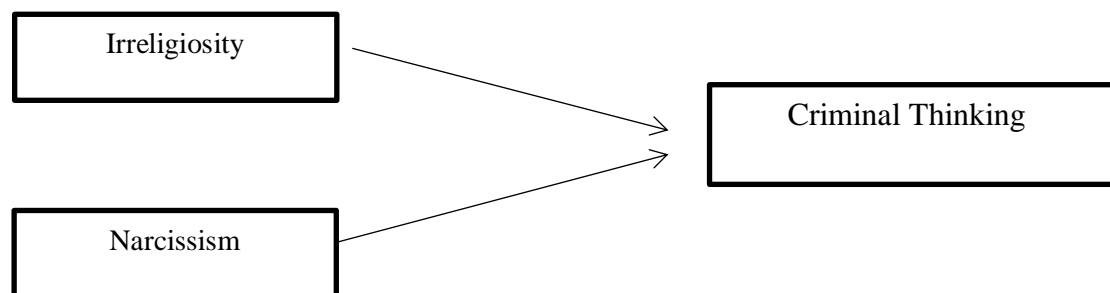
Hypotheses

H1: There is likely to be a positive relationship between irreligiosity, narcissism, and criminal thinking in criminals.

H2: Irreligiosity and narcissism are likely to predict criminal thinking in criminals.

Figure 1

Figure showing Proposed Model of the Study



Method

Research Design

The current study used a correlational research design.

Sample and Sampling Strategy

For the purpose of this study, 30 women and 30 men constituted the sample of 60 convicts ($N=60$). Convenience sampling strategy was used to gather data according to the

inclusion and exclusion criteria. The prisoners between the ages of 18 to 50 years were included. Only those convicted prisoners were included who were Muslims. Participants who were physically and/or psychologically challenged were not included.

Table 1*Demographic Characteristics of Criminals*

Demographics	<i>f</i> (%)	<i>M</i> (<i>SD</i>)
Age (in years)		32.8 (8.59)
Education (in years)		6.83 (5.57)
Father's Education (in years)		6.52 (5.64)
Father's Occupation		
Unemployed	1 (1.7)	
Laborer	31 (51.7)	
Business	19 (30)	
Driver	2 (3.3)	
Teacher	2 (3.3)	
Barber	4 (6.7)	
Butcher	1 (1.7)	
Mother's Education (in years)		4.33 (4.64)
Mother's Occupation		
Housewife	57 (95)	
Laborer	2 (3.3)	
Teacher	1 (1.7)	
Monthly Family income (in Rs.)		36533.3 (16981.0)
Family system		
Nuclear	38 (63.3)	
Joint	22 (36.7)	
Marital Status		
Married	40 (66.7)	
Unmarried	13 (21.7)	
Widow/Widower	07 (11.7)	
No. of Children		1.85 (1.71)
Occupation before Jail		
Unemployed	1 (1.7)	
Laborer	13 (21.7)	
Business	6 (10.0)	
Guard	10 (16.7)	
Housewife	18 (30.0)	
Tailoress	8 (13.3)	
Beautician	1 (1.7)	
Nursing	1 (1.7)	
Lawyer	1 (1.7)	

Teacher	1 (1.7)	
Crime committed		
Theft	10 (16.7)	
Murder	18 (30)	
Drug smuggling	10(16.7)	
Fight/ Dispute	3 (5.0)	
Corruption	2 (3.3)	
Fraud	6 (10)	
Dishonesty with money	2 (3.3)	
Rape	2 (3.3)	
Human trafficking	1 (1.7)	
Kidnapping	3 (5.0)	
Terrorism	3 (5.0)	
Duration of imprisonment (in months)		110 (124.4)
Age at time of imprisonment		29.7 (8.95)
No. of times imprisoned		
1	52 (86.70)	
2	7 (11.7)	
3	1 (1.7)	
Total time spent in jail (in months)		30.5 (27.8)

Assessment Measures

Following were the assessment measures used to collect data for this research:

Demographic Information Sheet

Demographic Information Sheet was designed to gather information about the participants' gender, age, education, family income, family system, marital status, number of children, occupation before coming to jail, crime committed, timespan of imprisonment, number of times imprisoned, and total timespan of imprisonment.

Nonreligious-Nonspiritual Scale (Cragun et al., 2015)

To measure irreligiosity among criminals, the Nonreligious-Nonspiritual Scale (NRNSS) was used. This scale has 8 items with item number 4 and 7 were to be reversed coded. There are two subscales (a) religiousness and (b) spirituality. However, the current study only measured institutional lack of religiousness to account for the variable of irreligiosity. The NRNSS also manifests convergent validity with established measures of religiousness through theoretically-expected correlations. For this scale, participants answered on a Likert scale, with 1 "strongly agree" and 5 "strongly disagree". The NRNSS exhibits a good internal consistency (.94) as well as test-retest reliability ($r = .92$). High scores on the scale indicate a lack of religiosity among participants.

Short Dark Triad – Narcissism Subscale (Jones & Paulhus, 2014)

It is a 27-item measure that assesses dark triad traits of personality with its three subscales, including narcissism, machiavellianism, and psychopathy. Each subscale consists of 9 items. The Cronbach alpha of the subscales ranges from .70 to .80 while test–retest reliability ranges from .77 to .84. Only the Narcissism subscale of SD3 was used to measure narcissism for the current study. Participants were asked to indicate their agreement on the narcissism subscale on a Likert scale with 1 “strongly disagree” and 5 “strongly agree. High scores show high levels of dark triad traits and higher levels of narcissism with reference to the subscale in use.

TCU Criminal Thinking Scales (Knight et al., 2006)

The current version of the TCU-CTS has 36 items and takes around 10 minutes to complete as a self-report measure. It has six subscales: entitlement (6 items), power orientation (7 items), justification (6 items), criminal rationalization (6 items), cold heartedness (5 items), and personal irresponsibility (6 items). The entitlement subscale measures a sense of privilege and ownership. The justification subscale is a measure of prisoners’ capacity to minimize the seriousness of criminal and antisocial acts. The power orientation subscale measures the need for control and power. The cold heartedness subscale measures callousness, lack of emotional involvement and empathy. The criminal rationalization subscale is a measure of negative attitude towards the law enforcing agencies and governing authorities. The personal irresponsibility subscale is a measure of a prisoner’s willingness to accept ownership for his criminal conduct. For each of the subscales, items are rated on a Likert scale, with 1 “strongly disagree” and 5 “strongly agree”. The internal consistency of the subscales ranges from .68 to .78 (Taxman et al., 2011).

Procedure

The permission was taken from the authors and IG Punjab Jail after explaining the nature and purpose of the research. After the permission was officially granted, the researcher went to the District Jail, Faisalabad where the superintendent allotted her a waiting room to carry out the data collection. The superintendent was informed about the inclusion and exclusion criteria for the research and was asked to recruit the participants for the study accordingly. As the sample included 60 imprisoned criminals, 30 women prisoners and 30 men prisoners were selected. The study measures were administered face to face in the presence of a police officer who was present throughout to ensure the safety of the researcher and to keep an eye on the prisoner. An informed consent was taken from all the respondents and it was clarified to them that it is a voluntary participation. Instructions about filling the questionnaires were given to the participants. The demographic form was filled first by the participants, followed by the rest of questionnaires. Each participant took around 10 to 15 minutes to complete the whole set of questionnaires. The response rate was 100% as the participants were selected by the superintendent jail and all the participants actively took part in the data collection process.

Ethical Considerations

- A permission letter was taken from the Head of Department of the University for collecting data from the district jail of Faisalabad.
- The Institute provided a letter requesting permission from the relevant authorities in the Punjab Prison Department to gather data from the district jail.
- The consent was taken from the participants and they were informed about their right to withdraw from participation at any point of the study if they want to.
- Results were reported accurately and presented by the researcher following APA guidelines.

Results

After the data collection, data was analyzed through IBM SPSS (Version 22 software). The details of reliability analysis, correlation analysis and regression analysis are given below

Table 2

Reliability Coefficients and Descriptives of Study Variables (N =60)

Variables	<i>M</i>	<i>SD</i>	Actual	<i>Cronbach's α</i>
Irreligiosity	22.98	3.55	9-27	.58
Narcissism	30.03	4.66	17-37	.70
Criminal Thinking	126.46	15.31	103-175	.42
Entitlement	22.63	4.20	12-30	.66
Justification	24.21	3.58	14-21	.51
Power Orientation	24.13	5.19	13-34	.71
Cold Heartedness	16.26	2.45	12-23	.51
Criminal Rationalization	22.50	3.70	14-30	.68
Personal Irresponsibility	21.71	3.67	13-28	.61

The results indicate that the scales for both independent variables were quite internally consistent. However, the alpha value for criminal thinking scale as a composite was below the standardized figure and hence, the subscales of the variable were used for further analysis of results as the subscales were fairly internally consistent.

The current study hypothesized that Irreligiosity and Narcissism are likely to have positive relationship with Criminal thinking, with reference to the subscales of the dependent variable. To assess this hypothesis of the study, Pearson Product Moment Correlation Analysis was done.

According to the results of the selected demographics as shown in Table 4.2, women were found to have a greater degree of cold heartedness and personal irresponsibility as compared to men. Education was found to be negatively related with power orientation and personal irresponsibility whereas age was not significantly related with any of the dimensions. Family system showed a positive relationship with Cold heartedness and Personal Irresponsibility, indicating a greater degree in nuclear family system. The independent variable of irreligiosity was not significantly related with any of the dimensions of criminal thinking. The second independent variable, narcissism, was found to be positively related with Power

orientation, Criminal rationalization, and Personal irresponsibility dimensions of criminal thinking.

Table 3

Inter Correlations among Irreligiosity, Narcissism, Criminal thinking subscales and selected demographics

Variables	1	2	3	4	5	6	7	8	9	10	11	12
1 Gender												
2 Education	-.67***											
3 Age	.07	-.04										
4 Family System	.42***	.53***	.11									
5 Irreligiosity	-.08	.12	-.03	.17								
6 Narcissism	.38***	-.41***	-.02	.35**	-.01							
7 Entitlement	-.04	-.02	.06	.14	.11	.14						
8 Justification	-.04	.03	.04	-.07	-.00	-.09	.03					
9 Power Orientation	.16	-.29*	-.00	.22	-.13	.29*	.15	-.23				
10 Cold Heartedness	.48***	-.22	.06	.26*	-.18	.21	-.12	-.27*	.13			
11 Criminal Rationalization	.22	-.22	-.08	.02	-.18	.28*	-.01	-.27*	.21	.40***		
12 Personal Irresponsibility	.32*	-.34**	.16	.35**	-.11	.39**	-.02	-.13	.20	.31*	.36**	

Note. Gender (1= men, 2=women); Family system (1= joint, 2= nuclear)

* $P < .05$, ** $P < .01$, *** $P < .001$

In order to further assess the unique contribution of both the predictors on the outcome variable of criminal thinking, Multiple Linear Regression analysis was conducted.

Table 4

Multiple Linear Regression Analysis of Irreligiosity, Narcissism and Criminal Thinking Subscales (N=60).

Predictors	Entitlemen t	Justification	Power Orientation	Cold Heartedness	Personal Irresponsibility	Criminal Rationalization
	B	B	B	B	B	B
Constant	16.80	32.20	18.47	17.83	14.99	22.47
Irreligiosity	0.11	-0.02	-0.16	-0.11	-0.09	-0.24
Narcissism	0.14	-0.30	0.35*	0.12	0.34**	0.22**
R^2	.03	.01	.09*	.08	.17**	.15**
F	0.93	0.26	3.07*	2.45	5.69**	5.25**

Note * $p < .05$, ** $p < .01$

All the subscales of criminal thinking were analyzed separately. Irreligiosity was not proven to be a significant predictor of any of the dimensions of criminal thinking. However,

narcissism was found to be a positive predictor of criminal rationalization, personal irresponsibility and power orientation. In conclusion, narcissism positively predicted criminal thinking whereas, irreligiosity did not predict any of the dimensions of criminal thinking.

Discussion

The present research explored irreligiosity and narcissism as correlates and predictors of criminal thinking in criminals. A series of statistical analyses were performed and the relationship of irreligiosity and narcissism with criminal thinking was analyzed in terms of the six subscales. The descriptive analysis showed that most of the participants were young adults, married and uneducated. The socioeconomic status of the majority was lower middle class and the family system of most of the participants was nuclear. Moreover, gender and family system were found to be significantly correlated with the criminal thinking dimensions of cold heartedness and personal irresponsibility. A negative correlation was found between education and the dimensions of power orientation and personal irresponsibility. Hence, demographics were not found to be much strongly associated with criminal thinking in the current study.

The first hypothesis was that there is likely to be a positive relationship between irreligiosity and criminal thinking in criminals. The correlation analysis revealed that the independent variable of irreligiosity was not significantly correlated with any of the subscales of criminal thinking. It was also hypothesized that irreligiosity predicts criminal thinking but the linear regression analyses carried out negated this hypothesis as well and the results were inconsistent with the previous literature. Adamczyk et al. (2017) showed that religiosity decreases the probability of criminal thinking and behavior as it has been suggested that belief in a religion leads to increased self-control and therefore, less criminal behaviors. On the contrary, Brauer et al. (2013) reported that religion has little effect on criminal behavior. Previous literature showed that the link between religion and crime needs further research. Hence, the first hypothesis of the current study is rejected on empirical grounds.

The second hypothesis stated that there is likely to be a positive relationship between narcissism and criminal thinking in criminals. The correlation analysis revealed that the independent variable of narcissism had a significant positive relationship with three of the subscales of criminal thinking i.e., power orientation, criminal rationalization and personal irresponsibility. The other hypothesis that narcissism is likely to predict criminal thinking was also significantly proven by linear regression analyses. These results are consistent with the previous literature as suggested by Bogaerts et al. (2021) and Hepper et al. (2014). This suggests that an increase in the degree of narcissism in an individual can possibly result in a significant increase in criminal thinking and hence, can have a significant impact on criminal thinking. Thus, the second hypothesis of the current study is accepted on empirical grounds.

Conclusion

In a nutshell, despite a huge amount of existing literature supporting the inverse religion-crime relationship, in the current study, irreligiosity did not have a significant positive relationship with criminal thinking in prison population, which brings into question the socio-cultural aspect of the proposed relationship between the two variables. On the other hand, the current study has succeeded in empirically justifying the proposed relationship between the

personality traits of narcissism and criminal thinking as they are significantly and positively related to three out of six subscales of criminal thinking.

Limitations and Suggestions

The sample size for the current study was insufficient to produce generalizable results due to unavailability of enough convicted prisoners at the District Jail, Faisalabad. Since, narcissism is a personality trait that develops with time, a longitudinal approach to this study could have helped to understand the impact of narcissism on criminal thinking in a more nuanced manner. The current study was quantitative and lacked the depth of a qualitative study. The nature of the study variables needed to be qualitatively analyzed in order to investigate their relationship more authentically. Despite face to face acquisition of data by the researcher from the prisoners, the credibility of data recorded on the criminal thinking scales was questionable due to the highly manipulative attitude of prisoners. During the data collection, the presence of a police officer led to a sense of insecurity among participants and made them withhold information. The current study included a sample of currently imprisoned criminals only. These variables could also have been studied on criminals not currently imprisoned as well as the general population in order to generalize the hypothesized relationship.

Implications

This study greatly supports the role of religious activities and how these activities can play a significant role in criminal thinking patterns as well as criminal behavior. The current research effectively highlights the impact of the personality trait of narcissism on criminal thinking which broadens the understanding of the role of personality on criminality. It will help researchers in further clarifying the impact of personality on criminal thinking patterns with specific reference to narcissism. The general population can possibly prevent the development of narcissistic tendencies among children since early childhood in order to prevent later tendencies leading to criminal thinking. Both of these study variables can play an effective role in their own respective domains in eliminating criminal thinking in particular and crime in general.

References

- Adamczyk, A., Freilich, J. D., & Kim, C. (2017). Religion and crime: A systematic review and assessment of next steps. *Sociology of Religion*, 78(2) 192–232. <https://doi.org/10.1093/socrel/srx012>
- American Psychiatric Association. (2022). *Diagnostic and statistical manual of mental disorders* (DSM-5-TR) (5th ed.). <https://doi.org/10.1176/appi.books.9780890425787>
- Australian Bureau of Statistics. (2022, June 28). *Cultural diversity: Census*. <https://www.abs.gov.au/statistics/people/people-and-communities/cultural-diversitycensus/2021>.
- Baggini, J. (2003). *Atheism: a very short introduction*. Oxford University Press.
- Bogaerts, S., Garofalo, C., De Caluwé, E., & Jankovic, M. (2021). Grandiose and vulnerable narcissism, identity integration and self-control related to criminal behavior. *BMC Psychology*, 9, 191. <https://doi.org/10.1186/s40359-021-00697-1>

- Brauer, J. R., Tittle, C. R., & Antonaccio, O. (2013). Does religion suppress, socialize, soothe, or support? Exploring religiosity's influence on crime. *Journal for the Scientific Study of Religion* 52(4), 753–74. <https://doi.org/10.1111/jssr.12063>
- Cragun, R. T., Hammer, J. H., & Nielsen, M. (2015). The Nonreligious–nonspiritual scale (NRNSS): measuring everything from atheists to zionists. *Secularism and Nonreligion*, 2(3), 36. <https://doi.org/10.17582/journal.src/2015/2.3.36.53>
- Deuchar, R., Mørck, L. L., Matemba, Y. H., McLean, R., & Riaz, N. (2016). It's as if you're not in the Jail, as if you're not a Prisoner: Young Male Offenders' Experiences of Incarceration, Prison Chaplaincy, Religion and Spirituality in Scotland and Denmark. *The Howard Journal of Crime and Justice*, 55(1-2), 131-150. <https://doi.org/10.1111/hojo.12160>
- Duwe, G., & Johnson, B. R. (2023). New insights for “what works”? Religiosity and the risk-needs-responsivity model. *Crime & Delinquency*, 1–26. <https://doi.org/10.1177/00111287231160736>
- Eller, J. D. (2010). ‘What is atheism?’ in P. Zuckerman (Ed.), *Atheism and secularity*, (1), 1-18.
- Gallup & Gillani Pakistan. (2023, July 7). *97% of Pakistanis perceive themselves as religious*. <https://www.gallup.com.pk/post/34778>
- Hepper, E. G., Hart, C. M., Meek, R., Cisek, S., & Sedikides, C. (2014). Narcissism and empathy in young offenders and non-offenders. *European Journal of Personality*, 28(2), 201-210. <https://doi.org/10.1002/per.1939>
- Jones, D. N., & Paulhus, D. L. (2014). Introducing the short dark triad (SD3): A brief measure of dark personality traits. *Assessment*, 21(1), 28-41. <https://doi.org/10.1177/1073191113514105>
- Khan, I. (2017). *Rise of atheism in Pakistan* [Unpublished doctoral dissertation]. University of Management and Technology.
- Knight, K., Garner, B. R., Simpson, D. D., Morey, J. T., & Flynn, P. M. (2006). An assessment for criminal thinking. *Crime & Delinquency*, 52(1), 159-177. <https://doi.org/10.1177/0011128705281749>
- Kohut, H. (1972). Thoughts on narcissism and narcissistic rage. *The Psychoanalytic Study of the Child*, 27(1), 360-400.
- Miller, J. D., Hoffman, B. J., Gaughan, E. T., Gentile, B., Maples, J., & Campbell, W. K. (2011). Grandiose and vulnerable narcissism: A nomological network analysis. *Journal of Personality* 79(5), 1013-1042. <https://doi.org/10.1111/j.1467-6494.2010.00711.x>
- Palmer, M. (2013). *Atheism for beginners*. Lutterworth Press
- Park, S. W., & Colvin, C. R. (2014). Narcissism and discrepancy between self and friends' perceptions of personality. *Journal of Personality*, 82(4), 278-286. <https://doi.org/10.1111/jopy.12053>
- Pew Research Center. (2015, May 12). *America's changing religious landscape*. Pew Research Center. <http://www.pewforum.org/2015/05/12/americas-changing-religiouslandscape/>.
- Saroglou, V. (2013). Conclusion: Understanding religion and irreligion. In *Religion, personality, and social behavior* (pp. 371-402). Psychology Press.
- Smith, G. A. (2021, December 21). *About three-in-ten U.S. adults are now religiously unaffiliated*. Pew Research Center.

- <https://www.pewresearch.org/religion/2021/12/14/about-three-in-ten-u-s-adults-are-now-religiously-unaffiliated/>
- Sutherland, E. H. (1947). *Principles of criminology*. J. B. Lippincott
- Sutherland, E.H., Cressey, D. R., & Luckenbill, D. F. (1992). *Principles of criminology*. General Hall.
- Sykes, G. M., & Matza, D. (1957). Techniques of neutralization: A theory of delinquency. *American Sociological Review*, 22(6), 664-670. <https://doi.org/10.2307/2089195>
- Taxman, F. S., Giuranna Rhodes, A., & Dumenci, L. (2011). Construct and predictive validity of criminal thinking scales. *Criminal Justice and Behavior*, 38(2), 174-187. <https://doi.org/10.1177/0093854810389550>
- Walters, G. (2001) Revised Validity Scales for the Psychological Inventory of Criminal Thinking Styles (PICTS). *Journal of Offender Rehabilitation*, 32(4), 1-13.
- Walters, G. D. (2009). Criminal thinking. In E. M. McMurran & R. Howard (Eds.), *Personality, personality disorder and violence* (pp. 281-296). Wiley-Blackwell.
- Walters, G.D. (2019). Psychological inertia revisited: Replicating and extending the differential effect of proactive and reactive criminal thinking on crime continuity. *Deviant Behav.*, 40, 156–170. <https://doi.org/10.1080/01639625.2017.1419684>
- Woodhead, L. (2016). The rise of ‘no religion’ in Britain: The emergence of a new cultural majority. *Journal of the British Academy*, 4, 245–261. <https://doi.org/10.5871/jba/004.245>