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Personality Dimensions, Anger Cognitions, Anger Expression and Recidivism Among Homicide Offenders

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ABSTRACT

Mitigating the multidimensional complexities inherent in recidivism to achieve systemic crime reduction constitutes a formidable challenge for contemporary societies. This study examined the relationships among personality dimensions, Dark Tetrad traits, antisocial personality, anger cognitions, anger expression, and recidivism among individuals convicted of homicide and subsequently released on parole. Utilizing a purposive sampling technique, data were collected from 150 paroled individuals aged 30 to 70 years using Recidivism Risk Scale for Individuals Convicted of Homicide, Big Five Personality Inventory, Short Dark Tetrad, Antisocial Personality Disorder Scale, Angry Cognitions Scale, and Trait Anger Expression Scale. Hierarchical multiple regression analysis revealed that recidivism was significantly predicted by extraversion, neuroticism, psychopathy, Machiavellianism, antisocial personality, behavioral expression of anger-out, and cognitive tendencies toward demandingness and misattributing causation. Conversely, adaptive cognitive appraisal negatively predicted recidivism. While conscientiousness, openness, agreeableness, narcissism, sadism, catastrophic evaluation, inflammatory labeling, overgeneralizing, and anger-in demonstrated correlational links, they did not emerge as significant predictors of recidivism. The findings of this study offer critical insights for law enforcement and criminal justice agencies, policymakers, researchers, and forensic psychologists.

Keywords: Anger, Homicide, Parole, Personality, Recidivism.

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Introduction

Crime prevention is the primary concern for law enforcement and criminal justice agencies, prompting the development and implementation of diverse strategies to reduce the crime rate (Kristoffersen, 2013). However, without preventing recidivism, the objective of crime reduction cannot be fundamentally achieved (Wartna & Nijssen, 2006). A substantial portion of overall crime is comprised of the crimes committed by habitual offenders, as evidence confirmed that more than 63 % of all violent crimes are committed by 1 % of the population (Falk et al., 2014). Moreover, most recidivists commit crimes within five years of release from prison (Peek & Nugter, 2009). Interrupting this cycle of crime poses a significant challenge for law enforcement agencies (Hall et al., 2016). Although the modern criminal justice system is more tilted towards a punitive framework, neither a punitive nor a rehabilitative model of criminal justice is solely effective in recidivism reduction (Latessa et al., 2020). However, recent decades have witnessed a gradual evidence-based shift towards a rehabilitative approach to reduce crime (Greenwood, 2008).

Recidivism is an act of reoffence following a formal conviction and sentencing for a prior offence, involving a relapse into criminal behavior either by repeating the same or a different offence (Schoeman, 2010). While different countries have adopted and implemented diverse targeted strategies to prevent recidivism, the criminal justice system in Pakistan is structurally and operationally inadequate to reduce recidivism (Khosro and Kousar, 2021). The phenomenon of recidivism involves a complex interplay of different factors (Yukhnenko et al., 2020). Broadly, the act of recidivism can be associated with adverse socioeconomic conditions, a toxic social environment, association with antisocial peers, substance use, unaddressed mental health issues, criminogenic needs and personality traits of offenders (Nnam et al., 2024). Evidence suggests that these factors are associated with different offences and offenders to different degrees (Thornberry, 2005). Without comprehending the specific relevance and interplay of these factors across different criminal categories and subsequently making evidence-based policies, the rate of recidivism cannot be sufficiently reduced (Butorac et al., 2017).

Literature Review

Assessing the risk of recidivism primarily relies on the presence of risk factors (Ortega-Campos et al., 2020), which serve as predictors of recidivism (Goodley et al., 2022). Empirical evidence suggests that unaddressed mental health needs, prison environment, substance use, association with antisocial peers, employment issues, marital status and low income are significant predictors of recidivism (Yukhnenko et al., 2020). Evidence further concluded that the presence of protective factors reduces the likelihood of recidivism (Labrecque et al., 2014). Prosocial behavior and associations, social support, enrollment in school and rehabilitative programs, and subjective well-being are protective factors against recidivism (Gubbels et al., 2024). To enhance clinical utility, the clinicians further categorized these factors into static and dynamic factors (Clarke et al., 2019). Substance abuse, social support, and socioeconomic opportunities are significant dynamic factors which are fluid and susceptible to interventions, whereas age, criminal history and personality of an offender are significant static factors which are relatively permanent (Lee et al., 2022).

A robust body of scientific literature has established personality as a significant predictor of recidivism (Chin & Dandurand, 2018). Personality profiles, such as the Dark Tetrad, strongly predict recidivism (Laurell & Daderman, 2005). Individuals with dark tetrad personality traits are found to recidivate more than individuals with light personality traits (Hurezan et al., 2024). Moreover, high neuroticism and high extraversion are positively correlated with recidivism (van Dam et al., 2005), whereas agreeableness and conscientiousness are found to be negatively correlated with recidivism (Le Couff & Toupin, 2009). Personality dimensions' dictate how an individual experiences and expresses anger (Pease & Lewis, 2015), making a nexus between personality, anger and criminal behavior (Kolla et al., 2017). A high level of experience of anger leads to a low level of anger control (Robertson et al., 2015). Emotional dysregulation and a deficiency in delaying gratification can lead to impulsive behavior and poor anger control, which can consequently lead to offending and reoffending (Ashton, 2022). Moreover, such states can distort perception and judgement, making individuals vulnerable to maladaptive anger expression and criminal behavior (Davey et al., 2005).

Objective

The objective of this study was to examine the relationship between personality dimensions, dark tetrad personality traits, antisocial personality, anger cognitions, anger expression, and recidivism among individuals convicted of homicide and subsequently released on parole.

Method

Sample

A sample of 150 participants aged 30 to 70 ($M = 53.27$, $SD = 6.27$) years was selected using

purposive sampling according to the following inclusion criteria:

1. Only individuals who were granted parole were included.
2. Only participants who committed the offense of homicide were included.
3. The sample was limited to convicted individuals.
4. The sample consisted entirely of male participants.
5. The sample was limited to participants within the age range of 30 to 70 years.

Table 1: Demographic Characteristics of the Sample ($N = 150$)

Characteristics	$M (SD)$	$f (%)$
Age	53.27 (6.85)	
Term of Sentence	24.48 (2.33)	
Education		
Below Matriculation		106 (70.7%)
Matriculation and above		44 (29.3%)
Marital Status		
Married		105 (70%)
Unmarried		45 (30%)

Hypotheses

1. There is a significant relationship among personality dimensions, dark tetrad personality traits, antisocial personality, anger cognitions, anger expression, and recidivism.
2. Personality dimensions significantly predict recidivism.
3. Dark tetrad personality traits significantly predict recidivism.
4. Antisocial personality significantly predicts recidivism.
5. Anger cognitions significantly predict recidivism.
6. Anger expressions significantly predict recidivism.

Procedure

After obtaining written permission from the original authors of the scales and the Punjab Probation and Parole Service department, participants who met the inclusion criteria were approached for data collection. Each participant was briefed regarding

the nature and purpose of the study, and rapport was established to ensure response accuracy. Before data collection, written informed consent was obtained from each participant. The participants were approached at their current locations. It took approximately 80 to 90 minutes to collect data from each participant. The data were collected from 150 individuals convicted of homicide and granted parole.

Measures

1. Recidivism Risk Scale for Individuals Convicted of Homicide (RRS-ICH)

RRS-ICH is a 42-item scale to assess the risk of recidivism in homicide offenders. It measures the risk of recidivism in homicide offenders across five factors: criminal justice and prison environment ($\alpha = 0.79$), mental health indicators ($\alpha = 0.78$), substance use ($\alpha = 0.61$), socioeconomic opportunities and social support ($\alpha = 0.69$), and antisocial associates and antisocial behavior ($\alpha = 0.73$) on a 5-point Likert scale. RRS-ICH demonstrates strong reliability with an alpha

coefficient of 0.84 (Ajmal & Iftikhar, 2026).

2. Big Five Personality Inventory (BFI)

The Urdu-translated version (Zia et al., 2025) of the Big Five Inventory (John & Srivastava, 1999) was used to measure the five broad personality dimensions, i.e., neuroticism, extraversion, conscientiousness, agreeableness, and openness to experience. It is a 44-item inventory with a 5-point Likert scale, ranging from strongly disagree to strongly agree. The internal consistency coefficients for the five subscales range from $\alpha = 0.86$ to 0.91 . It is a psychometrically valid and reliable tool (Zia et al., 2025).

3. Short Dark Tetrad (SD4)

The SD4 Short is a 28-item scale to measure four dark personality traits, i.e., narcissism, Machiavellianism, psychopathy, and sadism (Paulhus et al., 2021).

It consists of 4 subscales; each subscale is comprised of 7 items. The items are assessed on a 5-point rating scale. It was translated and validated by Yusuf & Tahir (2024) in the Urdu language. The alpha coefficient of the SD4 Urdu-translated version is .73, and the subscales are estimated as Sadism ($\alpha = 0.63$), Psychopathy ($\alpha = 0.61$), Narcissism ($\alpha = 0.56$), and Machiavellianism ($\alpha = 0.41$) (Yusuf & Tahir, 2024).

4. Antisocial Personality Disorder Scale (ASPDS)

Antisocial Personality Disorder Scale (Rashid & Bano, 2025) is a 28-item scale that measures antisocial personality on a 5-point Likert scale. It is an Urdu-language scale to measure antisocial personality. The alpha coefficient of ASPDS is

estimated at 0.94, and for the subscales, 0.67 and 0.94. The convergent validity of ASPDS against the psychopathy subscale of the Short Dark Triad is ($r = 0.67$). ASPDS is an indigenously developed, valid, and reliable scale (Rashid & Bano, 2025).

5. Angry Cognitions Scale (ACS)

The Angry Cognitions Scale (ACS) is a 54-item measure to assess underlying cognitions involved in how anger is acted out on a five-point rating scale. ACS consists of six subscales, each containing 9 items, that measure misattributed causation ($\alpha = 0.84$), catastrophic evaluation ($\alpha = 0.83$), overgeneralizing ($\alpha = 0.90$), demandingness ($\alpha = 0.86$), inflammatory labeling ($\alpha = 0.91$), and adaptive thinking ($\alpha = 0.82$) (Martin & Dahlen, 2009).

6. Trait Anger Expression Scale (TAES)

Trait Anger and Expression Scale (Rashid & Siddiqui, 2005) is a 25-item scale that measures trait anger and anger expression on a five-point Likert scale. Kazmi and Siddiqui (2008) established its reliability and validity against STAXI. The alpha coefficient of TAES was estimated at 0.78 and, for two factors, anger in, 0.68 and anger out, 0.78. Both factors, along with the TAES total score, show an average correlation with subscales of STAXI, which represents the concurrent validity of TAES (Kazmi & Siddiqui, 2008).

Analysis and Result

To investigate the relationship between personality dimensions, dark tetrad personality traits, antisocial personality, anger cognitions, anger expression, and recidivism among homicide offenders released on parole, the Pearson Product Moment correlation analysis was carried out (Table 2).

Table 2: *Intercorrelation Matrix for All Study Variables*

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1. Total Recidivism	-																							
2. Prison Env.	.34**	-																						
3. Mental Health	.22**	.22**	-																					
4. Antisocial Assoc.	.21*	.19*	.26**	-																				
5. Substance Use	.42**	.18*	.11	.29*	-																			
6. Social Support	.25**	.20*	.21**	.09	.15	-																		
7. Extraversion	.22**	.06	.11	.01	.03	-.07	-																	
8. Agreeableness	-.15	-.13	-.05	.03	.02	-.17*	.13	-																
9. Openness	.02	.12	.10	.07	.04	-.07	.14	-.02	-															
10. Conscientiousness	-.21*	-.03	.02	.02	-.04	-.09	.21*	.33**	.10	-														
11. Neuroticism	.25**	.06	.10	.00	.17*	.08	.22**	-.14	.06	-.13	-													
12. Narcissism	.07	.01	.02	-.11	.01	-.05	-.03	-.02	-.18*	-.02	.01	-												
13. Machiavellianism	.27**	.05	.07	-.06	.14	.01	.00	-.04	.03	-.20*	.07	.37**	-											
14. Sadism	.18*	-.00	.10	-.07	.09	.01	-.03	-.04	.06	-.26**	.11	.31**	.51**	-										
15. Psychopathy	.39**	.11	.01	.14	.35**	.00	.17*	-.01	.09	-.06	.22**	.02	.07	-.01	-									
16. Antisocial Pers.	.38**	.17*	-.06	.03	.20*	.08	-.27**	-.03	.01	-.13	-.05	.02	.10	.11	.07	-								
17. Adaptive	-.27**	-.18*	.01	-.12	-.09	-.14	-.15	-.10	-.10	-.06	.09	-.08	-.11	-.03	-.14	-.11	-							
18. Misattributing Cau.	-.04	.04	-.02	-.07	.04	-.12	-.04	-.10	.24**	-.03	.02	-.30**	-.21*	-.13	.06	-.06	.43**	-						
19. Catastrophic Eval.	.25**	.06	.09	.04	.20*	.17*	-.04	-.09	.09	-.18*	-.04	-.10	.09	.02	.11	.20*	-.04	.01	-					
20. Overgeneralizing	.04	.04	-.05	.08	.09	.05	.01	.02	.24**	.04	-.04	-.32**	-.14	-.03	.06	.07	-.09	.36*	.02	-				
21. Demandingness	.24**	.12	.17*	.18*	.11	.04	.05	-.03	-.07	-.03	.05	.02	.00	-.03	.04	-.06	.02	-.00	.01	-.05	-			
22. Inflamm. Labeling	.16*	.07	.11	.13	.02	-.00	.08	-.10	-.05	.01	.10	-.03	.04	-.07	.12	-.08	-.09	-.09	.09	-.03	-.12	-		
23. Anger Out	.23**	-.06	-.10	.09	.30**	.04	.02	-.14	-.03	-.08	.03	-.08	.04	.04	.17*	-.08	.00	.02	-.04	-.05	.11	.20*	-	
24. Anger In	-.02	.00	.03	.02	-.18*	.13	-.14	-.02	-.17*	-.05	.09	-.04	-.07	-.01	-.17*	-.11	.14	-.01	.09	-.03	.11	.14	.09	-

Results indicated that two personality dimensions, neuroticism and extraversion, have a significant positive relationship with recidivism. Conscientiousness has a significant negative relationship with recidivism. Whereas openness to experience and agreeableness have no significant relationship with recidivism. As far as relationships with dark tetrad personality traits and recidivism are concerned, the findings show that psychopathy, Machiavellianism, and sadism have significant positive relationships with recidivism, whereas narcissism has no significant relationship with recidivism. Moreover, antisocial personality has a significant positive relationship with recidivism.

About the relationship between anger cognitions and recidivism, the findings of the present study

suggest that catastrophic evaluation, demandingness, and inflammatory labeling have significant positive relationships, while adaptive cognitive appraisal has a significant negative relationship with recidivism. Whereas anger cognitions, misattributing causation, and overgeneralizing have no significant relationships with recidivism. Moreover, among anger expressions, anger-out was found to have a significant positive relationship, whereas anger-in has no significant relationship with recidivism.

Furthermore, to scrutinize the predictors of recidivism, a hierarchical multiple regression analysis was conducted across five sequential blocks. Personality dimensions, dark tetrad personality traits, antisocial personality, anger

cognitions, and anger expression were taken as independent variables (predictors), and recidivism as the dependent variable (Table 3).

Table 3: Hierarchical Multiple Regression Models Predicting Recidivism

Variable	B	95% CI for B		SE B	β	R^2	ΔR^2
		LL	UL				
Step 1						.15	.15***
(Constant)	139.37	104.80	173.94	17.49			
Extraversion	1.24	0.38	2.09	0.43	.24**		
Agreeableness	-0.40	-1.14	0.33	0.37	-.09		
Openness to Experience	-0.02	-0.67	0.63	0.33	-.00		
Conscientiousness	-0.91	-1.64	-0.18	0.37	-.21*		
Neuroticism	0.69	0.01	1.37	0.34	.16*		
Step 2						.29	.15***
(Constant)	80.96	38.85	123.0	21.30			
Extraversion	0.98	0.18	1.77	0.40	.19*		
Agreeableness	-0.48	-1.16	0.20	0.35	-.11		
Openness to Experience	-0.19	-0.81	0.44	0.32	-.04		
Conscientiousness	-0.54	-1.25	0.17	0.36	-.12		
Neuroticism	0.40	-0.24	1.04	0.32	.10		
Narcissist	-0.20	-1.18	0.77	0.49	-.03		
Machiavellian	1.15	0.17	2.13	0.50	.20*		
Sadism	0.35	-0.74	1.43	0.55	.05		
Psychopathy	2.19	1.19	3.18	0.50	.32***		
Step 3						.45	.16***
(Constant)	26.64	-14.49	67.77	20.80			
Extraversion	1.60	0.86	2.33	0.37	.30***		
Agreeableness	-0.53	-1.13	0.08	0.31	-.12		
Openness to Experience	-0.25	-0.80	0.31	0.28	-.06		
Conscientiousness	-0.46	-1.09	0.18	0.32	-.10		
Neuroticism	0.45	-0.12	1.02	0.29	.11		
Narcissist	-0.12	-0.99	0.74	0.44	-.02		
Machiavellian	1.01	0.14	1.88	0.44	.18*		
Sadism	0.15	-0.82	1.11	0.49	.02		
Psychopathy	1.86	0.97	2.75	0.45	.27***		
Antisocial Personality	0.64	0.43	0.84	0.10	.42***		
Step 4						.49	.04**

(Constant)	-36.21	-91.43	19.00	27.92	
Extraversion	1.69	0.98	2.41	0.36	.32***
Agreeableness	-0.42	-1.01	0.17	0.30	-.09
Openness to Experience	-0.12	-0.67	0.42	0.27	-.03
Conscientiousness	-0.44	-1.05	0.17	0.31	-.10
Neuroticism	0.44	-0.11	0.99	0.28	.10
Narcissist	0.07	-0.78	0.91	0.43	.01
Machiavellian	1.00	0.15	1.84	0.43	.17*
Sadism	0.04	-0.90	0.97	0.47	.01
Psychopathy	1.74	0.86	2.63	0.45	.26***
Antisocial Personality	0.69	0.49	0.89	0.10	.45***
Anger out	0.90	0.25	1.55	0.33	.17**
Anger in	0.86	-0.13	1.84	0.50	.11
Step 5					.60 .11***
(Constant)	-149.23	-231.44	-67.02	41.56	
Extraversion	1.44	0.78	2.11	0.35	.27***
Agreeableness	-0.37	-0.91	0.18	0.27	-.08
Openness to Experience	-0.27	-0.79	0.25	0.26	-.06
Conscientiousness	-0.35	-0.91	0.22	0.29	-.08
Neuroticism	0.54	0.03	1.05	0.26	.13*
Narcissist	0.17	-0.64	0.98	0.41	.03
Machiavellian	0.86	0.08	1.64	0.39	.15*
Sadism	0.27	-0.59	1.14	0.44	.04
Psychopathy	1.34	0.52	2.16	0.42	.20**
Antisocial Personality	0.64	0.46	0.83	0.09	.42***
Anger out	0.72	0.10	1.35	0.32	.14*
Anger in	0.72	-0.18	1.63	0.46	.09
Adaptive	-1.11	-1.73	-0.49	0.31	-.24**
Misattributing Causation	0.68	0.02	1.33	0.33	.15*
Catastrophic Evaluating	0.91	-0.16	1.98	0.54	.10
Overgeneralizing	-0.07	-0.59	0.46	0.27	-.02
Demandingness	4.87	2.47	7.27	1.22	.23***
Inflammatory labeling	1.05	-0.31	2.40	0.69	.09

Note. $N = 150$. CI = confidence interval; LL = lower limit; UL = upper limit.

* $p < .05$. ** $p < .01$. *** $p < .001$.

A five-step hierarchical multiple regression analysis was conducted to predict total recidivism ($N = 150$).

Step 1, which included the Big Five personality dimensions, was statistically significant and

accounted for 15% of the variance in recidivism ($R^2 = .15$, $\Delta R^2 = .15$, $p < .001$). In step 2, the addition of the Dark Tetrad personality traits significantly improved the model, bringing the total explained variance to 30%, $\Delta R^2 = .15$, $p < .001$. The inclusion of antisocial personality in step 3 also yielded a significant increase in explained variance, $\Delta R^2 = .16$, $p < .001$. In Step 4, the addition of anger expression accounted for a smaller but statistically significant amount of unique variance, $\Delta R^2 = .04$, $p < .05$. Finally, the inclusion of anger cognitions in Step 5 significantly improved model fit, explaining an additional 11% of the variance, $\Delta R^2 = .11$, $p < .001$. The five-step model accounted for a total of 60% of the variance in recidivism ($R^2 = .60$).

The complete model (Step 5) showed that, among personality dimensions, extraversion ($\beta = .27$, $p < .001$) and neuroticism ($\beta = .13$, $p < .05$) significantly predict recidivism. Among dark tetrad personality traits, psychopathy ($\beta = .20$, $p < .05$) and Machiavellianism ($\beta = .15$, $p < .05$) significantly predict recidivism. Antisocial personality ($\beta = .42$, $p < .001$) was also found to be a significant predictor of recidivism. As far as anger cognitions and anger expressions are concerned, the findings suggest that misattributing causation ($\beta = .15$, $p < .05$), demandingness ($\beta = .23$, $p < .001$), and anger out ($\beta = .14$, $p < .05$) are significant predictors of recidivism, while adaptive cognitive appraisal ($\beta = -.24$, $p < .001$) serve as significant negative predictor of recidivism. Multicollinearity was not a concern across any of the steps, as all Variance Inflation Factors (VIFs) remained well below the threshold of 5.0 (maximum $VIF = 1.75$).

Discussion

A low crime rate is a key benchmark for a developed and civilized society, yet crime control remains a persistent challenge across the world (Albanese, 2017). Due to its severity and complex dynamics, managing homicide presents a further challenge (Asongu & Acha-Anyi, 2019), with various underlying trends, patterns, and contributing factors (Lappi-Seppälä & Lehti, 2014). Empirical evidence suggested a relationship between anger, the personality of an offender, and offence and reoffence (Wood & Newton, 2003). The present study investigated the relationship between personality dimensions, dark tetrad personality traits, antisocial personality, anger cognitions, and anger expression, and recidivism

among individuals convicted of homicide who were later released on parole, and the results the study confirmed the relationships among these variables.

This study found a significant positive relationship between neuroticism, extraversion, and recidivism, and a significant negative relationship between conscientiousness and recidivism. Moreover, neuroticism and extraversion were found to be significant predictors of recidivism. These results match the findings of previous studies. Several studies found neuroticism and extraversion positively correlated with recidivism (van Dam et al., 2005). Moreover, people high in extraversion were found to possess a high tendency towards the commission of crime (Brown, 2016; Seyidoğlu, 2025). Neuroticism is associated with criminal behavior (Möttus et al., 2012) and is a significant predictor of recidivism (Hurezan et al., 2024). As far as conscientiousness is concerned, criminogenic literature suggests a negative relationship with recidivism (Le Couff & Toupin, 2009).

Among the dark tetrad personality traits, the present study shows a significant positive relationship between psychopathy, Machiavellianism, and sadism and recidivism. Moreover, psychopathy and Machiavellianism were found to significantly predict recidivism. These findings also match the findings of previous studies. Individuals with dark tetrad personality traits are found to recidivate more than individuals with light personality traits (Hurezan et al., 2024). Psychopathy is the darkest trait among all four dark traits due to its relationship with criminal behavior (Trulson et al., 2016). It has a significant positive relationship with recidivism (Tharshini et al., 2020). Psychopathy is further found to be more strongly associated with recidivism in violent crimes (Book et al., 2016). Studies also confirmed high rates of recidivism in homicide cases among psychopaths (Laurell & Dåderman, 2005). Moreover, several studies confirm the significant relationship between Machiavellianism and recidivism (Hurezan et al., 2024; Međedović, 2024; Pandey, 2022) and between sadism and recidivism (Baert et al., 2020; Plouffe et al., 2019).

Antisocial personality disorder was found to have a significant positive relationship with recidivism and to be a significant predictor of recidivism in the present study, which is also confirmed by several previous studies (Bonta et al., 2014; Cooke, 2010;

Oprış et al., 2025; Shepherd et al., 2018; Sohn et al., 2020). Antisocial personality disorder is a strong predictor of recidivism (Wojciechowski, 2022). Individuals with antisocial personality disorders are found to be more involved in violent crimes (Maghsoodloo et al., 2012). Anger out expression, in contrast to anger in expression, was found to have a significant positive relationship with recidivism and is a significant predictor of recidivism. These findings also collate with the findings of previous studies which suggested a significant link between anger out expression and crime and recidivism (Averill, 1983; Çorapçioğlu & Erdoğan, 2004; DiGiuseppe & Tafrate, 2006; Jones & Hare, 2016; Loza & Loza-Fanous, 1999; Murphy et al., 2007; Van Kleef et al., 2004; Wegrzyn & Kissler, 2017).

The present study further found that anger cognitions such as catastrophic evaluation, demandingness, and inflammatory labeling have significantly positive relationships with recidivism. Moreover, misattributing causation and demandingness were found to be significant predictors of recidivism. In contrast, adaptive cognitive appraisal has a significant negative relationship with recidivism and is a significant negative predictor of recidivism. These results also match criminological literature. Anger cognitions have a strong relationship with crime (Chereji et al., 2012). Cognitive distortions involved in anger and crime involve narrow and automated thoughts which promote criminal behavior (Beck, 1999). Several studies confirmed the relationship among cognitive distortions, offence, and reoffence (Alqatwan et al., 2025; Baker et al., 2008; Healy & O'Donnell, 2006; Syasyila et al., 2024). Moreover, studies on cognitive distortions confirmed the

relationship between cognitive bias and recidivism (Barriga et al., 2000; Bonta & Andrews, 2023; Guyll & Madon, 2003; Schönenberg & Jusyte, 2014).

Limitations

Since the study focused exclusively on paroled male homicide offenders, its findings cannot be generalized to females, individuals incarcerated within prisons, or offenders convicted of lesser crimes. Evaluating recidivism in homicide offenders in their natural environment outside of prison is a primary strength of this research, but it simultaneously poses a limitation for its application to incarcerated prisoners.

Conclusion

The present study examined the relationship among personality dimensions, Dark Tetrad traits, antisocial personality, anger cognitions, anger expression, and recidivism. These variables emerged to have a significant relationship with recidivism among paroled individuals convicted of homicide. Extraversion, neuroticism, psychopathy, Machiavellianism, antisocial personality, behavioral expression of anger-out, and cognitive tendencies toward demandingness and misattributing causation were found to be positive predictors of recidivism in homicide offenders. Conversely, adaptive cognitive appraisal negatively predicted recidivism. The findings of this study offer critical insights for law enforcement professionals, criminal justice agencies, policymakers, researchers, and forensic psychologists. However, the findings of the present study are limited to homicide offenders and suggest that future studies expand to other crimes.

Conflict of Interest

The authors showed no conflict of interest.

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