The Final Draft (25% of Total Grade): Due Week 15

Make sure you completely fill out *all* the information in the sections below. Failure to complete these sections fully and honestly may incur a loss of points. Responding to some questions with "no" or "n/a" or "I don't know yet" *is* acceptable; however, leaving any responses blank is not. If you do not understand any questions you are encouraged to contact your instructor.

Section 1

Name: Rahaf Amasaib

Your Major: Industrial Engineering

Section 2

On a scale of 1 to 10, how confident are you *now* feeling about writing for this course?

1/ still about a 7/10 as I feel like there is so much room for error in the traps we can fall in

Section 3

Final grade you received from your previous assignment (Working Draft): 1/100/100

Section 4

Based on your last assignment and the lessons you have received so far in ENG 204, what **three** things have you given extra care and attention towards for this assignment?

1/ Word choice: there have been certain words that were somehow overused by us but the professor pointed them out and explained the actual meaning and their usage in any paper.

For example, we have been exposed to moreover, to illustrate, showcase, hence, several, henceforth, etc.

2/ Sentence structure: the parallel structure is important in every paragraph and every part of the paper. Parallel structure makes the paper easier to process and nicer to read.

3/ Functions of sentences: identifying the function of each sentence on the paper is important as it helps with maintaining the parallel structure and easier processing of information. By

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Commented [PMM2]: I have so many of them 😊

Commented [PMM3]: It does I wish I could program for that

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asking oneself the right questions, the paper will answer all the possible questions that can come to a reader's mind.

Checklist

Before submitting, make sure that you can write "YES" for each of the items below.

1/ I understand that if I write "YES" to any of these statements then such a response is completely true. I further understand that if there is evidence that I have not responded accurately then my paper will be returned to me ungraded. In such a case, I will have to correct my paper and resubmit it. In so doing, I will be subject to a "late penalty."

YES

2/ I have accurately and fully completed an Auto-Peer review of my paper.

YES

3/ I have named the file for submission as follows: Working Draft [my iLearn name] For example: Final Draft Philip Michael McCarthy.

YES

4/ The file I am submitting is a Microsoft Word document.

YES

5/ I have read the rubric and all relevant course material and included all the information required.

YES

6/ I have changed the header of this paper to the ALL CAPS title of my paper.

YES

7/ I have pressed spellcheck/grammar check and corrected any text as appropriate.

YES

8/ I have carefully read out loud my entire paper and corrected issues where appropriate.

YES

Commented [PMM5]: Smart lady 😊

Wish I could persuade you to join the MA TESOL program You'd be great!

9/ I have carefully checked my paper to ensure there are *no* examples of any form of plagiarism. I fully understand what these forms of plagiarism are and I realize fully that any examples of plagiarism will have severe consequences (including *but not limited to* a zero grade, an F for the course, a formal report to administration, and/or having to write a completely new research paper on a different topic). I further confirm that I have had ample opportunity to discuss issues of plagiarism with my instructor and that any and all of my questions have been addressed.

YES

10/ All work submitted in this paper is my own. No other person was involved in any of the actual writing of this paper.

YES

Write Your Paper Below

Begin your paper at the <u>start of the next page</u>. Note that APA Level 1 and Level 2 headers have *not* been provided for you: You are now required to complete these yourself. Complete the paper using appropriate paragraphs. Remember to leave the rubric at the end of the paper.

FACTORS INFLEUNCING PSYCHOPATHY	
Psychopathy: A Combination of Both Biological and Environmental Factors	
Rahaf Omar Amasaib	
Department of Industrial Engineering	
ENG 204: Advanced Academic Writing	
Dr. Phillip McCarthy	
May 9, 2022	

Abstract

Psychopathy is a disorder that can cause significant dysfunction, affecting our daily performance. The disorder is often diagnosed during late childhood or early adulthood. In this paper, I argue that biological and environmental factors are the primary influencers of psychopathy. Additionally, I investigate multiple biological and environmental factors that determine psychopathic behavior. Research, twin studies, and behavioral genetic conclusions suggest clear environmental triggers of natural psychopathy biomarkers in an individual's body. Furthermore, I also consider opposing opinions on the influencers of psychopathy, such as primarily biological or environmental factors, with no overlap between the two. This paper is important because people must have an accurate understanding of what causes psychopathy, as psychopathic tendencies lead to harmful outcomes in society. I conclude my paper by suggesting further research and governmental assistance to ensure growing up in a safer environment without the harmful consequences of psychopathic tendencies.

Keywords: Psychopathy, environmental factors, biological factors, twin studies, neurobiology, behavioral genetics

Commented [PMM6]: This is the Final Paper. As such, there is likely to be significantly fewer comments because Well ... no more updates, right? ☺ That said ... I'll probably end up highlighting some stuff in yellow Because ... that's what I do. ☺

Psychopathy: A Combination of Both Biological and Environmental Factors

Psychopathy, as defined by Anderson and Kiehl (2015), is "a neuropsychiatric disorder marked by deficient emotional responses, lack of empathy, and poor behavioral controls, commonly resulting in persistent antisocial deviance and criminal behavior" (p. 1). Psychopathy is caused by genetic factors, including variants in receptor systems, low autonomic nervous system responses, weak connections of neural networks, and low hormone levels. However, such factors are not active unless triggered by particular environmental factors, including disorganized attachment styles, reinforced omnipotence from parents, and parental criminal history. As such, in this paper, I argue that psychopathy is a result of a combination of both biological and genetic factors.

I support my position with the following three arguments. First, I argue that some of psychopathy's biomarkers are already present in an individual but are triggered by environmental factors. In his study, Blair (2015) illustrates how specific biological characteristics are the primary biomarkers of behavioral disorders. For example, conduct disorder is considered one of the leading factors of psychopathy or psychopathic tendencies. Second, I explain that behavioral genetics are the primary evidence supporting the idea of psychopathic personality traits resulting from upbringing and hereditary. Anderson and Kiehl (2015) explain behaviors, including aggression, by neurobiological models with adverse behavioral outcomes that stem from environmental pressures and consequently lead to psychopathy. Finally, I argue that both genes and upbringing determine whether a child will grow up with psychopathic tendencies. After various tests conducted by Blonigen et al. (2005), the authors conclude that the contribution of genetic and environmental factors together is more significant than the contribution of each alone.

I also consider positions that opponents may have. First, people may argue that environmental factors are the main factors of the onset of psychopathy as unhealthy relationships cause reduced empathy towards others and leads to psychopathy (Eisenberg et

al., 2011). Second, I consider some opponents' arguments that specific brain structures and circuits are naturally developed in a way that increases people's susceptibility to psychopathy (Anderson & Kiehl, 2015). Third, some critics argue that psychopathic tendencies result from strictly inherited biological factors in an individual. That is, as neuroimaging research suggests, abnormal empathic responses are associated with decreased activity in regions in the body related to emotional processing (Decety & Moriguchi, 2007). However, Hicks et al. (2012) reveal a significant connection between psychopathy and environmental factors that extend to biological and genetic ties in an individual. Therefore, we can conclude that the opposing viewpoints have some merit but are weak in various points that will be justified further throughout the paper.

This paper is important because there has been much debate about how psychopathic traits and tendencies result from either biological, environmental factors, or both. This paper may help parents track their children's behavioral patterns early on to combat issues that stem from psychopathic tendencies, as many of them turn out to be convicted criminals and pathological liars. As such, it may help with clarifying misconceptions about the differences between psychopathy and psychopathic personality traits. Finally, with the knowledge of what leads to psychopathic tendencies, authorized personnel can help those who grew up with psychopathic traits. I conclude my paper by offering the following recommendation. Initially, governments need to consider providing financial aid to low-income counties to get their children assessed for psychopathic biomarkers from childhood. Providing financial assistance will ensure growing up in a safe environment as people with psychopathic tendencies could develop aggression and violence. In a similar manner, financial assistance will decrease criminality rates significantly as those susceptible to psychopathy are also susceptible to drug abuse and criminality

Genetic and Environmental Factors Affecting Psychopathy

Psychopathy is a neuropsychiatric disorder that innately exists in its sufferer. More specifically, for a person to be characterized as a victim of psychopathy, they should have the biomarkers of psychopathy, including variants in hormones and weak connections of neural networks (Anderson & Kiehl, 2014). However, some people argue that psychopathic tendencies are caused by environmental factors, which consequently implies that primarily environmental factors cause psychopathy. While this argument has some merit, studies have demonstrated how psychopathy is not precisely only about psychopathic tendencies in an individual, as psychopathic tendencies do not stem from genetic factors alone. Therefore, multiple studies have been conducted in this field in relation to other aspects of personality disorders to address this debate. Based on research studies in the field, psychopathy appears to result from a combination of both environmental and biological factors.

Environmental Triggers of Psychopathy's Biomarkers

Understanding what psychopathy's biomarkers are in an individual is essential to understanding the biological triggers of psychopathy's onset. Some indicators of psychopathy are hereditary in an individual but are activated by particular environmental conditions. According to Moon (2021), the genetic activation because of environmental factors is attributed to the fact that there is no specific "psychopathy gene" discovered. For example, low responsiveness of the amygdala is considered one of the significant biomarkers of psychopathy. However, Schultz et al. (2016) suggests that psychopathic tendencies indicate abnormal amygdala responsiveness. Having said that, the opposite is not always accurate as the abnormality in the amygdala responsiveness can indicate the presence of other disruptive behavioral disorders. Furthermore, according to Hunter (2010), low levels of MAOA-L (monoamine oxidase A) variant indicate psychopathy in the case of a past childhood trigger that could include persistent ill-treatment from parents or the elderly. Hunter concludes that psychopathy is heritable in terms of biology, but it is not officially diagnosable until triggered by environmental factors to activate the inactive inherited genes in an individual.

Consequently, it is safe to conclude that no set gene indicates the presence of psychopathy as the genes present require an environmental trigger.

In addition to the biological aspect of psychopathy, there is a significant association of psychopathy with behavioral disorders. As Blair (2015) argues, biological traits are the key biomarkers of behavioral disorders like conduct disorder. Blair explains conduct disorder as a developmental-behavioral disorder characterized by recurrent violent or antisocial behavior that disturbs the child's surroundings. The author continues to explain the disadvantages of conduct disorder as it affects children's academic and life performance. Blair relates conduct disorder with psychopathy as they are similar in terms of cognitive impairments and abnormalities. The commonality between psychopathic tendencies and conduct disorder is interpreted to conclude that a child will have to be diagnosed with conduct disorder to develop psychopathic traits in adulthood. Thus, the relation between conduct disorder and psychopathy shows the importance of genes and upbringing as causes of psychopathy.

Additionally, tThe association of conduct disorder and psychopathy is explained further by a study conducted by Glenn (2009). After explaining the biological indicators of conduct disorder, Glenn touched on the fact that conduct disorder is an indicator of psychopathy. Then, the author described the link between psychopathy and conduct disorder using the resemblance between the key characteristics of both. Individuals suffering from psychopathy and conduct disorder are susceptible to a lack of compassion, guilt, regret, and empathy for others. Therefore, identifying the biological indicators of psychopathic tendencies in an individual is necessary to understanding the triggers of psychopathy's development.

Behavioral Genetics' Perspective About Psychopathy

Specific personality behaviors in individuals characterizes psychopathy. According to Shafir (2021), psychopathic personality behaviors include superficial charm, pathological lying, need for dominance, and lack of empathy. Psychopathy is usually identified by the

convergence of these cognitive, personal, and behavioral traits. One consistent result in the adolescent psychopathological research is that people with psychopathic tendencies, compared to ones with no psychopathic tendencies, exhibit autonomic hypo reactivity in reaction to harmful stimuli (Gao & Raine, 2010; Lorber, 2004, as cited in Wang et al., 2012). Coupled with the autonomic hypo reactivity is a history of childhood behavior trauma. According to Giacomo et al. (2021), the impact of childhood trauma on psychopathy is significant. After various studies, Giacomo et al. concluded that there is a strong correlation between the presence of childhood trauma and the development of psychopathy in adulthood. Accordingly, childhood trauma could act as an environmental trigger to the onset of psychopathy.

Vital indicators of psychopathy are caused by the association of environmental and biological influencers of psychopathy. For example, behavioral genetics researchers

Anderson and Kiehl (2015) shed light on psychopathic behaviors, including aggression, by neurobiological models with adverse behavioral outcomes. For instance, as Neumann et al. (2016) states, behavioral outcomes associated with psychopathic behaviors include violence, criminal behavior, and excessive pathological lying. The outcomes specified by the authors stem from environmental pressures and increase an individual's susceptibility to psychopathy. As such, various environmental and biological factors trigger certain behaviors that are critical indications of psychopathy.

Twin studies explore the causes, biological and environmental factors, of psychopathy together, and separately. This exploration is important to examine the effect of each factor, one at a time. Twin studies are the precandidate for this type of study as twins share the same basic genes. Consequently, the genetic aspect of the study is fixed but the environmental aspect can vary. By conducting twin studies, authors collect data that can describe how genes and upbringing determine whether a child will grow up with psychopathic tendencies. The description of the cases of twin studies is based on varying environmental factors by

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separating the twins. For example, one study conducted by Backman et al. (2021) examined the effect of various environmental factors on psychopathy. The sample taken was tested with varying types of parental nurture while fixing the biological susceptibility to psychopathy through inactive genes to observe the long-term effect of parents' care on children. The results of the study conveyed substantial evidence that specific environmental variables may influence the prevalence of psychopathic tendencies in children. Thus, the effect of environmental factors influencing psychopathy in twins is nonnegligible.

Another study that was conducted on the regards of twin studies also conveyed the same results. The study was conducted by Blonigen et al. (2005) wherein he performed tests on samples of twins. The twins were examined to determine the degree of overlap between genetic and environmental factors affecting psychopathy. After various tests conducted by Blonigen et al., they concluded that the contribution of genetic and environmental factors together is more significant than that of each alone in terms of the development in psychopathy. Therefore, based on twin studies, people's susceptibility to psychopathy is elevated once they are exposed to a combination of both environmental and biological factors.

A Combination of Both Environmental and Genetic Factors?

The onset of psychopathy is based on a relatively equal conjoined effort between both biological and environmental factors. However, some critics believe that psychopathy is a result of primarily environmental factors or primarily genetic factors as they separately play a considerable role as influencers of psychopathy. In addition, other critics also believe that the root of psychopathy is only based on genetic factors. Regardless of all the viewpoints associated with this issue, there is sufficient evidence to demonstrate the importance of the combination of both environmental and biological factors to the onset of psychopathy.

Psychopathy Results From Environmental Factors

Lack of intimacy in a person's life can significantly impact the presence of psychopathic traits in them. More specifically, as Ali and Chamorro-Premuzic (2009) explain, lack of intimacy is negatively correlated with life satisfaction. This negative correlation is attributed to the fact that life satisfaction is associated with healthy relationships that do not lack intimacy. The connection between lack of intimacy and lack of empathy that occurs in psychopaths is usually rooted in people's past as a result of emotionally unavailable parents. However, it could also be a result of an unhealthy relationship in someone's present. This time variation in the existence of intimacy in an individual is sufficient to show the importance of intimacy in relationships during childhood and adulthood. Given the results of the study conducted by Ali and Chamorro-Premuzic, they conclude that psychopathy and lack of intimacy positively correlate. That is, people with psychopathic traits are not empaths because of the lack of intimacy in their past. Although this study has some merit, it also has some limitations. More precisely, the cause of psychopathy is focused on the correlation between lack of intimacy and psychopathy. This finding conveys that if people do not lack intimacy, they will not exhibit psychopathic traits. Consequently, the argument loses its strength as biological factors triggering the environmental factors previously specified appear simultaneously.

Although lack of intimacy is considered one of the main influencers of psychopathy, critics may argue that other environmental factors are significant influencers of the onset of psychopathy. The argument is attributed to the fact that unhealthy relationships cause reduced empathy towards others and may lead to psychopathy (Eisenberg et al., 2011). Additionally, critics believe that environmental factors like bullying can cause psychopathy. That is, adults that were bullied as children develop emotional difficulties early on their lives (Takizawa et al. 2014). As a result, children who experience emotional difficulties are more likely to develop antisocial personality disorder stemming from social rejection as they grow up.

psychopathy as they exhibit similar characteristics. Therefore, bullying victims during childhood are more prone to psychopathy during adolescence.

In addition to the direct correlation of the antisocial personality disorder and bullying, there is a different correlation discovered by Finnish researchers. A study conducted by Finnish researchers examined Finnish male criminal records. The records found a connection between bullying and criminality, which leads to psychopathy. The results found a proportional relationship between bullying and crime (Dewar, 2020). Since crime is considered one of the indicators of psychopaths, this study gave critics the upper hand in the argument. Thus, psychopathy is caused by environmental factors. While this argument appears to be accurate, it still has some limitations. One of the limitations of the Finnish study is that it fell short in mentioning that the study was taken while fixing the genetics variable. All the candidates of this study could have had the genetic factors triggered by those specific environmental factors. Therefore, there is not enough evidence to conclude that psychopathy mainly results from environmental factors.

Psychopathy Results From Biological Factors

Opponents also argue that the core of psychopathy is due mainly to genetic factors. According to Anderson and Kiehl (2014), psychopathy is following a natural progression with considerable biological influences that negatively impact extensive functional systems, specifically in the paralimbic brain structures. Anderson and Kiehl further argue that people with psychopathy will have difficulty developing stimulus-punishment connections. As a result, people with psychopathy lack the idea of participating in adaptive actions, which, in turn, conflicts with primary motives. Nevertheless, psychopathy's environmental risk factors cannot be negligible. As such, environmental risk factors have significant power and influence on the onset of psychopathy. However, a study conducted by Hicks et al. (2013) performed various tests on a sample with fixed genetic factors and variable environmental factors. The study demonstrated multiple environmental factors that stood out because of

their great extent of importance. For example, as Hicks et al. argues, ineffective parenting and predicaments within the family and misbehavior from the child could result in conduct disorder. Therefore, conduct conflicts can lead to societal rejection, increasing people's likelihood of getting involved in drug use and offenses. Thus, the authors conclude that as environmental risk factors accumulate, it increases a person's susceptibility to psychopathy in the long run.

Another consideration of the cause of psychopathy is strictly genetic factors, as opponents may argue. More specifically, Blair (2015) suggests that an understanding of psychopathy can be derived from both structural and functional magnetic resonance imaging research. Blair explains how sMRI (structural magnetic resonance imaging) studies show an abnormal volume in regions of the brain directly affecting the onset of psychopathy. For example, there exists reduced amygdala volume in adults, reduced temporal lobes, and reduced orbitofrontal cortex (area of the prefrontal cortex just above the orbits of the brain) in people with psychopathy or psychopathic tendencies. This finding concludes that from a neurobiological perspective, the affected regions of the brain show great significance to the onset of psychopathy. Despite this conclusion, Frazier et al. (2019) addresses the concern that psychopathy research has generally neglected developmental data revealing substantial environmental impacts on genetic and behavioral components, leading to a significant number of critiques. In their study, Frazier et al. had two main objectives, collecting data about studies on neurobiological and genetic factors influencing psychopathy and evaluating findings on the research conducted. In addition, the authors think that environmental factors shape psychopathic tendencies existing as a result of genetic and neurobiological abnormalities. Consequently, the study stresses the importance of environmental factors to activate the genetic and neurobiological factors.

Conclusion

In this paper, I argued that psychopathy results from a combination of both environmental and biological factors. A study explained how certain biological traits are the primary biomarkers of behavioral disorders that lead to psychopathic tendencies. This revelation is established by behavioral geneticists that reinforce the concept of psychopathic personality traits emerging from a combination of environmental and biological factors. Furthermore, twin studies reveal that children's genetic makeup and composition vary when subjected to different environmental aspects, determining if a child develops psychopathic tendencies. The twin studies and behavioral geneticists' primary objective is to address the nature vs. nurture debate about the causes of psychopathy.

The primary triggers of psychopathy have been identified as environmental factors. For example, environmental factors like lack of intimacy are argued to be underlying causes of psychopathy. However, this conclusion about the effect of lack of intimacy conveys that people in healthy intimate relationships will not exhibit psychopathic tendencies as they do not lack intimacy. Thus, lack of intimacy cannot be a leading factor in the influence of the onset of psychopathy. In addition, opponents argue that specific brain structures can contribute to the susceptibility of psychopathy. Consequently, this argument favors biological factors as being the cause of psychopathy. Specific brain structures' contribution to psychopathy's onset is reinforced by neuroimaging researchers in favor of primarily biological factors influencing psychopathy. Nevertheless, researchers disregard the importance of environmental factors as some biological factors are inactive unless triggered by environmental factors. Therefore, various tests have been conducted to explain the importance of environmental and biological factors working hand in hand to affect the development of psychopathic tendencies.

Although the nature vs. nurture debate is infamous, the root cause of psychopathy has not been discovered. Though 93% of adult male psychopaths in the United States are convicted criminals, a decrease in the degree of criminality from psychopathic tendencies

have not been observed. This inobservance to the decrease of criminality can be attributed to the lack of evidence surrounding how to identify psychopathic traits from early childhood, thus making it necessary to conduct additional research on this topic. Consequently, understanding the underlying cause of psychopathy is crucial as it will give authorities and specialists in the field advantage in targeting those susceptible to psychopathic tendencies. The help from authorities and specialties could not be achieved unless children are observed by their parents to examine the psychopathic traits present in an individual early on. Thus, vigilant observation from parents and authorities, which can start to identify different traits of psychopathy, can potentially lead to a decrease in the degree of criminality. Aside from the advantage gained by parents, public awareness will be generated as government financial support must be provided. As a result, this action could assist the less fortunate who may be later diagnosed with psychopathy. Evidently, understanding the underlying causes of psychopathy will indirectly better people's lives by decreasing criminality rates and increasing safety in neighborhoods.

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submit the paper there by 5pm Monday, May 30th
Rahaf ... you've been amazing

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The Final Draft will be evaluated based on the rubric below as well as all materials, instructions, and feedback provided by the instructor. Note that evaluations assume good punctuation, word choice, grammar, presentation, and strength of arguments. Evaluations also assume an appropriate quality of writing, length of response, and that language issues discussed in class have been followed appropriately. Points will be deducted if these assumptions are not met. Points will also be deducted if the template has not been completely and appropriately filled out, or if any item from the template is missing. A further points' deduction will occur if an incorrectly named file is submitted.

Rubric for Evaluating the Final Research Paper

Final Research Paper

The final research paper is 10-12 pages (3200 – 3850 words, excluding reference list, abstract, and title page) and incorporates feedback from the drafting process.

Elements		Points
Content		
	Title Page	
	Abstract and Key Words	/5
	Effectively summarizes research paper (between 130 and 150 words)	
	Lists 3-5 relevant key words	

	Introduction (~1 page)	/5
	Provides appropriate and compelling entry to the topic	
	Clearly articulates the research question(s) and/or thesis	
	Body (~9-11 pages)	/50
	Presents a well-structured, logically-argued, and cohesive discussion	
	Includes headings that reflect the paper organization	
	Supports all points/arguments with credible and relevant evidence and cites definitions of key terms/ideas as applicable	
	Synthesizes multiple sources	
	Shows originality, critical thinking, and in-depth, nuanced analysis	
	Conclusion (~up to 1 page)	/8
	Restates main points and addresses the research question/thesis	
	Comes to logical conclusion from evidence	
	Makes final comment(s)	
References		/7
	Uses correctly formatted APA in-text citations	

	Includes correctly formatted APA references	
	Contains all and only the cited texts	
Style	Entire paper	/10
	Is polished in tone and style appropriate for an academic audience	
	Uses clear and sophisticated language and variety in sentence	
	structure	
Mechanics	Entire paper	/5
	Is accurate in terms of grammar, spelling, punctuation,	
	capitalization, word choice, and transitionals	
Format/	Entire paper	/5
Layout	Entire paper	/3
	Follows APA page layout (title page, running head, headings, font, etc.)	
Revision		/5
	Incorporates feedback from the Working Draft and any consultations	

<u>Total</u>	/100