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The Transformation of Mohamed Atta: The Relevance of Personality in Radicalization

Peter Langman

ZeroEyes, Inc, Conshohocken, Pennsylvania, USA

Correspondence: Peter Langman (peterlangman@yahoo.com)

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ABSTRACT

This is a single-case study of Mohammed Atta that utilizes Theodore Millon's model of personality disorders to explore Atta's transformation from a markedly shy, sensitive, and gentle person who abhorred fanaticism and violence into one of the leaders of the 9/11 terrorist attacks. First, a brief review of Atta's life and personality is presented. This is followed by a delineation of three possible pathways that could explain his transformation. These pathways include what Millon identified as a puritanical compulsive personality, a selfless dependent personality, and a spineless denigrating personality. Because personality is complex and multifaceted, it is noted that Atta's transformation could have been a result of some combination of these three personality dynamics. The role of personality factors, in combination with life circumstances, in expanding our understanding of the radicalization process is discussed.

1 | Introduction

Mohamed Atta, one of the leaders of the terrorist attacks on September 11, 2001, was a complex figure. His father said, "My son was almost like an angel .... He is like a virgin girl in his politeness and shyness" (Radwan 2001). He also said, "My son is a very sensitive man; he is soft" (McDermott 2006, 19). How sensitive was Atta? "He was so sensitive that he could become emotional if an insect was killed" (Cloud 2001). Not only was he exquisitely sensitive, but Atta himself described jihadist terrorists as "brainless, irresponsible people" (Lankford 2012, 152) and rejected violence as a way to resolve problems (Crewdson 2004).

How does someone who is gentle and sensitive and condemns terrorists end up committing an act of devastating violence, killing thousands of innocent people? To simply say that he became radicalized does not shed light on the path he traveled from being soft and sensitive to callous and cruel. This article is an exploration of the psychological factors that may have contributed to Atta's transformation from being like an angel to a mass murderer. The larger purpose, however, is to investigate the role of personality traits in the radicalization process.

1.1 | Radicalization: Angles of Analysis

The exploration of psychological factors among terrorists has a tangled history. As summarized by Corner and Gill, "Over the space of 40 years of research on terrorist motivation the literature has jumped from one extreme position ('they are all mentally ill') to the exact opposite ('by definition, a terrorist cannot be mentally ill')" (2015, 23).

For this discussion to be meaningful, however, the term 'mental illness,' needs to be defined. Post wrote, "Most terrorists are 'normal' in the sense of not suffering from psychotic disorders" (2007, 3). The fact that they are not psychotic, however, does not mean that they are not depressed, bipolar, traumatized, or personality disordered. There are many ways that terrorists could be psychologically disturbed other than being psychotic.

Gill and Corner noted, "To expand the terrorist literature it is necessary to expand the dichotomous thinking an individual is either mentally ill or not" (2015, 26). Horgan wrote, "a broad consensus has emerged in the psychological literature on terrorism that situational, and not personal, qualities determine terrorist behavior." He added, however, "But that does not mean that there is no role for personal disposition .... We urgently need to revisit just where in the terrorism process personal disposition matters, and how" (2017, 202).

Similarly, Kruglanski et al. wrote:

> even though there may not be a unique personality profile that characterizes violent extremists prone to volunteer to extremist organizations, certain individual characteristics relevant to determinants of the radicalization process may certainly contribute to those persons' likelihood of radicalizing under the proper circumstances.
>
> (2017, 226)

This article explores how Atta's "personal disposition" or "individual characteristics" may have contributed to his radicalization, transforming him from a shy, gentle person into a terrorist.

1.2 | Personality Disorders

Before proceeding, a brief overview of personality disorders may be helpful. Whereas everyone has a personality, most people do not have personality disorders. Personality disorders consist of clusters of traits that are so extreme and/or rigid that they create distress either for the people themselves, and/or for others with whom they interact. In the United States, personality disorders are diagnosed based on the criteria in the Diagnostic and Statistical Manual, Fifth Edition, Text Revision (DSM-5, TR).

In addition, however, the work of Theodore Millon (1928–2014) is a vital contribution to our understanding of personality. Millon was the founder of the *Journal of Personality Disorders* as well as the Institute for the Advanced Studies in Personology and Psychopathology (subsequently renamed to The Millon Personality Group). He worked on the chapters on personality disorders for several revisions of the DSM, and produced what is perhaps the most comprehensive research on personality disorders in his book *Disorders of Personality* appearing in a series of three increasingly expanded editions (1981, 1996, 2011), with the final edition containing 1105 pages.

Millon's research goes beyond the DSM in several ways. First, he includes disorders that are concepts in the literature but are not included in the current edition of the DSM. Whereas DSM contains 10 personality disorders, Millon's latest work contains 15 categories of personality. This provides a broader range of categories with which to understand people's functioning.

Second, Millon presents six subtypes within each disorder, noting how combinations of different personality styles are expressed. These subtypes provide a much more sophisticated model of personalities than the DSM's diagnostic criteria which are utilized to simply make the binary choice of whether or not a particular personality disorder can be diagnosed.

The subtypes consist of combinations of traits from two or more personality types. For example, someone who is narcissistic and antisocial constitutes a very different personality style than someone who is narcissistic and avoidant. Instead of being limited to the 10 disorders in the DSM, Millon defines 90 personality variants.

Finally, in Millon's model not all personality disorders are equal in severity. He describes how under significant stress one personality disorder can deteriorate into, or blend with, a more severe disorder. This is a critical aspect of his work that makes it possible to articulate profound changes in people's personality and behavior.

Other aspects of Millon's model will not be utilized in this article, but may be worth noting to provide further evidence of the comprehensiveness of his approach. First, Millon articulates how each personality manifests across eight domains: expressive emotion, interpersonal conduct, cognitive style, self-image, intrapsychic content, intrapsychic dynamics, intrapsychic architecture, and mood/temperament.

The model also defines each personality by where it falls within three polarities: pleasure/pain, passive/active, and self/other. Finally, the six subtypes within each category are placed in a hierarchy from normal to abnormal functioning. Thus, each category contains two variants of the personality that Millon identifies as normal "styles," two variants that are personality "types," and two variants labeled as personality "disorders."

The comprehensiveness of Millon's model of personality makes it a highly useful approach for understanding the complexities of Atta's functioning. Thus, though the DSM will be quoted at times, the bulk of the analysis will rely on Millon's research.

Millon's articulation of personality disorders, subtypes, and decompensation from one disorder to another has been used to account for a similar transformation from shyness to violence in Osama bin Laden (Langman 2020), as well as Dylan Klebold, one of the two Columbine High School attackers (Langman 2009).

1.3 | Previous Research on Atta

This article builds on the work of Lankford (2012) and Immelman (2002). Lankford argued that Atta had been severely depressed for years and that his suicidal attack was driven not by ideology but his overwhelming depression and desire to die. Immelman argued that Atta exhibited compulsive and schizoid personality traits, as well as others that were less prominent.

The different approaches of Immelman and Lankford are not mutually exclusive. Because of an overlap of symptoms, the same symptoms or traits may be evidence of depression and a personality disorder. In addition, mood disorders and personality disorders often co-exist within individuals. Thus, both their formulations may be valid.

What this article seeks to accomplish is to make sense of Atta's transformation from a nonviolent person who opposed terrorism to a leader in the deadliest terrorist attack in history. Because he did not leave a journal or other source that would provide an intimate record of his thoughts and feelings, this analysis must rely on comments of his and the observations of people who knew him.

Though there was significant consistency across many people who were interviewed about him, including family, classmates, professors, and peers, it is possible that their reports were biased or skewed out of a desire to humanize Atta and/or minimize their culpability for not having seen any warning signs of impending violence.

Thus, any discussion of his psychological dynamics will be limited by the available information and must rely to some extent on speculation and interpretation.

1.4 | Methodology

This is a single-case study using publicly available information on Atta to explore his life, personality dynamics, and stressors. Information on Atta was sought through internet searches and the use of databases such as Google Scholar and ResearchGate. In addition, Amazon.com was searched for books that contained relevant information on Atta. Sources utilized include several articles by journalists, a book, a government report, and two scholarly articles.

Once material on Atta was gathered, the information was reviewed for evidence of potential personality disorders. This evidence was then compared to a wide range of personality categories in the work of Millon. The goal was not to arrive at a conclusive diagnosis of Atta, but to demonstrate how his transformation from gentleness to violence could be accounted for through an understanding of his personality.

2 | A Brief Review of Mohamed Atta

2.1 | Background

Though there is insufficient space to attempt to tell Atta's life story here, a few details are provided for context (these are from McDermott 2006 unless otherwise noted).

Atta was born in Egypt in 1968, the third child but first son of his parents. The family was nominally Sunni Muslim, but were not very religious, being described as being part of a "secular generation" in Egypt that was more focused on modernity and the future than following religious tradition.

Atta's father was strict and ambitious. Atta's sisters both graduated from the prestigious Cairo University, with one becoming a cardiac specialist and the other a professor of zoology. Though Atta did well in high school, he struggled with his advanced education. Though he graduated from Cairo University, his marks were lower than his sisters', prohibiting him from attending the university's graduate school.

Atta struggled to live up to his father's expectations regarding his education and career. His father explicitly told Atta he needed to achieve as much as others in the family: "I told him I needed to hear the word 'doctor' in front of his name .... We told him your sisters are doctors and their husbands are doctors and you are the man of the family" (Yardley 2001).

As a result, his father pushed him to go to Germany to continue his education. Atta did not want to leave Egypt, but did as his father insisted.

According to a friend, "Atta grew frustrated because he was unable to fulfill his academic ambitions in his homeland" (Cloud 2001). He ended up applying to Hamburg University in Germany and being rejected. After his father made allegations of discrimination, Atta was eventually admitted. After only a few weeks, however, Atta quit and enrolled at Technical University Hamburg-Harburg (McDermott 2006; Lappin 2002).

Though Atta was radicalized during his time in Germany, it is not possible to pinpoint a specific incident as the start of his transformation. Many of the observations of his behavior were not tied to a particular date, and the story of his involvement with al-Qaeda remains hidden.

Several experiences, however, may have contributed to his transformation. In 1995 he made a pilgrimage to Mecca. In 1996 he began attending a mosque in Hamburg that was known for being militant. For an unknown reason, he wrote his will in 1996—this apparently was before any involvement in terrorist circles. Then, in 1997, he reportedly spent time in a terrorist training camp in Afghanistan. Nonetheless, in 1999, he completed his thesis (Meloy 2004).

2.2 | Life Domains

Instead of providing a chronology of Atta's life, various aspects of his functioning will be highlighted to assist with determining relevant personality traits. Though the description of him is broken down into categories, a person is too complex to be neatly divided into boxes. Thus, there is overlapping material across some of the categories.

2.3 | Masculinity/Identity

As noted, Atta's father described as soft, sensitive, and even feminine. The father, who also had two daughters, objected to how his wife treated Atta: "I used to tell her that she is raising him as a girl, and that I have three girls" (Yardley 2001). In addition, "The father was the disciplinarian, grumbling that his wife spoiled their bright, if timid, son, who continued to sit on her lap until enrolling at Cairo University" (Yardley 2001). His father's nickname for him was "bolbol," which means "little bird" in Arabic (Radwan 2001). How Atta felt about his father calling him a girl and a little bird is not known.

Similarly, it is not known how Atta felt about himself as a young man, but he was described as "a scrawny youth—only 5 ft. 7 in. and until recently quite thin" (Cloud 2001). Atta reportedly was "driven" when he used exercise equipment, suggesting perhaps a desperate need to build himself up physically. His lack of athletic prowess and perhaps even basic coordination was commented on by a friend: "To fly a plane, what a joke! Mohamed could hardly ride a bike" (Cloud 2001).

Thus, Atta may have felt profoundly insecure regarding himself: "Acquaintances remember Atta as reserved, not physically imposing, never aggressive. [A friend] thought Atta 'not too keen on sports,' and the words used by others to describe him are mostly feminine ones: 'like a soft girl, kind and nice, very delicate, elegant'" (Crewdson 2004).

2.4 | Sexuality and Marriage

As a young man, Atta reportedly wanted to get married (McDermott 2006). His attitude toward women and sexuality, however, was markedly odd.

Atta was Egyptian, a nation where belly-dancing was popular, yet he "would leave the room whenever belly dancing programs—staples of Egyptian broadcasting—came on" (McDermott 2006, 13). More broadly, he "had little tolerance for any display of female sexuality. Even sleeveless blouses caused him to grimace" (p. 20).

Despite his self-reported interest in finding a wife, "several who knew Atta thought he seemed uninterested in women," and one person "thought that when Atta talked about marriage it was only 'symbolically'" (Crewdson 2004). It was also reported, "He spoke of a desire to marry, but was remote to the point of rudeness with women" (Yardley 2001).

A friend said of Atta, "that for him, being a practicing Muslim, it was not easy to be 24 years old and unmarried and have no sexual relationship whatsoever" (Crewdson 2004). If it was not easy for him at 24, what was it like when he was in his thirties? Another friend said, "He seemed to regret not having made a family yet. When we met, I had children and he was not yet married. I felt that really bothered him" (Radwan 2001). Not only may Atta have felt inadequate as a male due to his perceived effeminacy and lack of physical strength and coordination, he was markedly uncomfortable with women and female sexuality, and apparently depressed regarding his failure to find a wife (assuming he really desired one).

2.5 | Pleasure, Affect, and Order

Atta not only had little interest in sex, but seemed to find no pleasure in life. Someone who knew him commented, "He was reluctant to any pleasure" (McDermott 2006, 26). He did not enjoy socializing, declining invitations to attend gatherings or other events. He viewed music as evil, did not enjoy eating, and objected to fun or pleasure on principle. As argued by Lankford, this could have been a result of depression. In addition, however, it could have been a matter of Atta's personality. In other words, he could have been both depressed and disdainful of pleasure.

One person said of Atta, "He owned almost no books, didn't like food, and didn't listen to music" (McDermott 2006, 32). Another commented, "Atta thought that no music of any kind had a place in the life of a devout Muslim, and that the same went for good food and fun .... He thought that the heart would die through fun" (Crewdson 2004).

This avoidance of pleasure seemed linked to his mood and demeanor. Multiple people commented that Atta rarely smiled or laughed. People who knew him "came to wonder whether Atta might be missing some essential human part" (Crewdson 2004). Atta once said, "How can you laugh when people are dying in Palestine?" (McDermott 2006, 61) According to Atta, "Joy kills the heart" (McDermott 2006, 60). One source summed up Atta's affective functioning by stating, "There were no emotional excesses or peaks" (Crewdson 2004).

Though he had apparently always been unusually serious, it seems that this became more marked toward the end of his life. Volker Hauth, Atta's friend and fellow student, noted that Atta previously had been able to laugh at jokes about Arab dictators. After having been away for a year, when Atta returned he seemed to have become serious to the point of never even smiling (Cloud 2001).

In addition to having limited emotional expression, Atta had limited ability to deal with any kind of disorder. He needed things to be done according to a plan and a schedule. Once he was attending a dinner at someone's house, but the meal was not ready when he thought it should be, so he went into the kitchen to speed things up "because the proper timetable wasn't being followed" (McDermott 2006, 62).

On another occasion, Atta went to a movie theater with his buddies. Before the film started there was the usual chatter in the audience; this was distressing to Atta, who muttered, "chaos, chaos" (McDermott 2006, 26). It seemed as if any lack of order was upsetting to him. When he led classes on Islam, any deviation from the structure he sought to impose on the class caused him to "grow visibly upset, chewing on his lower lip in agitation" (McDermott 2006, 61). This attitude existed not only at the personal level, but also the international. Atta reportedly "hated the lack of order he saw in the West" (McDermott 2006, 88).

2.6 | Social Interactions

Multiple people attested that Atta did not have good social skills. He was not simply shy, but odd and at times abrasive. He reportedly had a "heavy, foreboding presence" and was "slightly awkward, stiff, and self-contained" (McDermott 2006, 25). He was at times either oblivious of other people's presence or simply avoided them, often walking through a room and not even acknowledging the people there.

He was disliked by his housemates, being messy and refusing to help out in the apartment. He also tried to impose requirements

on his roommates: “When [Atta] was not around, the other men mocked his sternness and complained about all his rules” (McDermott 2006, 60). When Atta taught seminars on Islam, his demeanor drove students away. Reportedly, “there was a ‘wall’ between him and the students” (McDermott 2006, 47).

One source noted that he could be polite or even amiable, “but was never warm” (McDermott 2006, 23). Another source described him as introverted, reserved, and “very conscientious” (Hooper 2001). This conscientiousness was seen when Atta was let go from a job. His paycheck contained more than he had earned. In response, he returned the unearned money. In addition, 2 days before the attack on 9/11, when Atta returned a rental car, he made sure to mention that the oil light was on (Hooper 2001). Considering that he was about to commit mass murder, this seems like a remarkable example of oddly proper behavior.

Though there were reports that at times he seemed at ease among people, more often he was not. He was not only uncomfortable around women, but among men, too. In contrast to what might be expected from someone who was shy, however, he could be offensive: “Sometimes he was too frank or blunt with people. If he did not like something about someone, he would go up and say it to his face” (Radwan 2001). A friend of his noted this tendency, commenting, “If he thought that I said or did something wrong, then he would say that in front of anybody” (Cloud 2001). One writer noted, “despite these hints of a prickly personality, the overriding impression is one of a reserved and gentle man driven by a fierce moral code” (Radwan 2001). An acquaintance summed Atta up by stating he “was simply much too strange” (Crewdson 2004).

2.7 | Feeling Trapped

The combined pressure to marry and to get a doctorate may have resulted in anguish and panic for Atta. When the father introduced him to a prospective bride, Atta became engaged. This, however, was predicated upon his receiving a Ph.D. As Lankford 2012, 155) explained:

> Atta's father arranged the marriage based on the agreement that his son was about to receive his Ph.D., but in fact, Atta had been lying to his father and was not even enrolled in a doctoral program. It must have been incredibly frightening for Atta, because it was only a matter of time before the truth would be exposed, at which point he and his family would be disgraced as frauds, and the engagement would be canceled.

The prospect of having his deception discovered, and the resulting impact on his family and their reputation, may have left Atta feeling desperate. Atta's closest German friend commented, “increasingly, I felt a sense of despair in him, on a personal level” (Lappin 2002). It was reported that Atta's “only hope for a good urban-planning job in Egypt was to be hired by an international organization. He tried but never was. The young man sent West to better his future at home now worried that he had no future in Egypt at all” (Yardley 2001). In fact,

> during a trip back to Egypt, Atta pleaded with his mother to try and convince his father to allow him to stay there permanently. She said no. She insisted that Atta must do what his father wanted, and go to the United States to pursue his doctorate .... Atta lied and said he would, but a few months later, he was preparing for his suicide attack.
>
> (Lankford 2012, 154)

2.8 | Transformation

As noted above, Atta left the university for a year. This was ostensibly to write his thesis, yet he dropped out of sight. Multiple people noted that following this year Atta was more serious, smiling even less than he had previously. One writer stated, “he seemed more serious and aloof to those who had known him before” (Finn 2001). Another wrote, “Those who had known him as a quiet student say his demeanor became more brooding, more troubled” (Yardley 2001). Atta reportedly “had grown more sullen about his life prospects.” A friend “found Atta depressed about not having a career or a family back home” (Cloud 2001).

What might have contributed to these changes? Perhaps his failure to fulfill his father's demand that he earn a doctorate. Perhaps his issues with sexuality and failure to become a husband and father. Perhaps having become engaged under false pretenses, with the impending shame of this being discovered looming over him. Or any combination of these stressors.

Besides the change in his demeanor, Atta became more religious. For most of his life, no one saw evidence of anti-Semitism or anti-American attitudes in Atta. A peer stated, “He hated extremism” (Radwan 2001). He reportedly was tolerant of different faiths and claimed “that he would not approve of violence to solve conflicts, and that there must be ways to convince people by other means” (Crewdson 2004). Toward the end of his life, however, a coworker noted that Atta “was very, very religious .... My impression is that he became more and more intense” (Finn 2001). At some point, Atta began to “voice virulent anti-Semitic and anti-American opinions” (Kean and et al. 2004, 178).

Atta not only became vocally anti-Semitic, but his prejudice had a paranoid flavor. He “saw a worldwide conspiracy at work, bolstered by the Americans, but run always by Jews. He blamed Jews for almost every wrong imaginable” (McDermott 2006, 67). Also, where he previously looked disdainfully on the disorder he perceived in Western culture, he began viewing this through a sinister lens: “the necessity of jihad—to get rid of the Jews and Americans who intentionally induced misunderstanding. The ways of the West, he said, were the means by which Satan tempted and spread confusion among the believers” (McDermott 2006, 88).

Atta viewed Jews as controlling finance and the media. He even saw a Jewish plot in President Clinton's affair with Monica

Lewinsky: "So paranoid had Atta become .... That he believed Monica Lewinsky was 'an agent sent by the Jews' to bring down the Clinton administration because it was too sympathetic to the Palestinian cause" (Crewdson 2004).

According to someone who knew him, "Atta's increasingly paranoid thinking ... began to remind of 'Nazi ideas, according to which the Jews were the group that planned to extinguish Islam and control the world'" (Crewdson 2004). He believed that Jews instigated violence in Kosovo, Bosnia, and Chechnya in an attempt to limit the spread of Islam. He reportedly believed that Israel sought to control the region from the Euphrates to the Nile and establish a theocratic government.

A government report noted that Atta's religiosity increased "as his tendency to assert leadership became increasingly pronounced" (Kean et al. 2004, 177). This passage suggests that along with a change in his religiosity there was also a change in his personality along the lines of increased confidence or narcissism. Atta reportedly "moved with an air of command" and was considered the "boss" by his colleagues (Finn 2002).

3 | Personality Analysis

Making sense of Atta's personality is not simple, and what follows is speculative based on the limited information we have about him. What are offered are not solid conclusions, but conceptualizations that attempt to make sense of Atta through a variety of perspectives on his personality.

First, there are several personality disorders that may be relevant for understanding Atta's social awkwardness. Avoidant personality disorder consists of "a pervasive pattern of social inhibition, feelings of inadequacy, and hypersensitivity to negative evaluation" (American Psychiatric Association 2022, 765). This can be understood as an exaggerated form of shyness.

Alternatively, schizoid personality disorder is characterized by "a pervasive pattern of detachment from social relationships and a restricted range of expression of emotions" (American Psychiatric Association 2022, 741). One difference between these two disorders is that people who are avoidant desire social connections but avoid them due to fear of being embarrassed, being judged as inadequate, and ultimately rejected. In contrast, people who are schizoid, possess "a more pervasive detachment and limited desire for social intimacy" (American Psychiatric Association 2022, 741). They simply do not have the same desire for human connection, being content with little to no closeness to others.

Another personality disorder that involves both limited social interaction and a lack of emotion is schizotypal personality disorder. This, however, also involves peculiar thoughts and experiences, difficulty separating reality from fantasy, and a more debilitating social deficit than that seen in Atta.

The barrenness of Atta's interpersonal world could be a result of aspects of either avoidant or schizoid personality traits. Because personality disorders are not mutually exclusive, however, he may have had features of both disorders. On balance, however, it seems that avoidant is a more accurate label. Schizoids are not only uninterested in social relationships, but also exhibit a severe lack of emotion. Though Atta displayed a limited range of affect, the descriptions of his intensity and hints of turmoil (e.g., biting his lip, virulent expressions of hatred) suggest that he experienced significant emotions but attempted to repress their expression.

In contrast, schizoids are notable for seeming emotionally vacant: "There is a pervasive imperviousness to emotions, not only to those of joy and pleasure. Feelings of anger, depression, or anxiety rarely are expressed" (Millon 2011, 678). Atta's hostility toward the West, his intense anti-Semitism, his intermittent expressions of displeasure about trivial things—all of these suggest an emotional life beyond what would be seen in a schizoid personality.

A particular subtype of the avoidant personality is the "hypersensitive avoidant." Unlike some shy people who may go out of their way to not offend others, this variant of the avoidant personality can be "irritably edgy ... engaging at times in wrangles and disappointments with others, vacillating between moments of being agreeable, sullenly passive, and irritably angry" (Millon 2011, 731). This makes sense of Atta's intermittent rudeness and offensiveness.

Atta's limited range of emotional expression could be attributed to depressive personality traits, or simply to being depressed. In addition, however, as noted by Immelman, Atta had significant aspects of a compulsive personality (in DSM-V-TR this is "obsessive-compulsive personality disorder"). Millon described people with this personality as being preoccupied with rules, conventions, formality, and morality. Such people "are contemptuous of those who behave 'frivolously and impulsively'; emotional behavior is considered immature and irresponsible" (2011, p. 492). Thus, their emotional expression is rigidly controlled and they disdain pleasure as a frivolity that should be avoided because life is serious.

In particular, Atta exhibited signs of the subtype that Millon labeled the "puritanical compulsive." These are people who "typically appear grim and cheerless, exhibiting an anxiously tense and serious-minded prudish morality" (Millon 2011, 503). This would account for Atta's refusal to watch belly-dancers and to be discomfited by women in sleeveless blouses.

As Millon wrote, "Indignant and judgmental about the lack of perfection in others, their puritanical attitudes are abrasive and irritating" (2011, 504). In addition, "The intense anger and resentment felt by these individuals is given sanction, at least as they see it, by virtue of their being on the side of righteousness and morality" (Millon 2011, 503).

At the extreme end of the spectrum, compulsive traits may blend with paranoid personality traits, "including bigoted, dogmatic, and zealous characteristics" (Millon 2011, 503). This would explain Atta's views of Jews and America being engaged in insidious activities to bring down the Muslim world.

Yet, if such people are obsessed with being moral, how could someone like Atta have become a killer? Millon asked this very question and provided an answer:

> How can these self-righteous moralistic personalities engage in abrasively violent and terrorist acts? How can they abrogate their own moral code by killing others, engaging in suicide bombing of 'innocents'? These personalities are likely to have been convinced by their leaders that they will achieve a higher, more august/moral ground by virtue of adhering to their sanctioned immoral actions.
>
> (2011, 503)

Another variant of the compulsive personality—the "bureaucratically constricted"—may also be relevant in Atta's case. These are people who align themselves with an organization to manage their internal struggles: "They feel that their alliance with a company, a union, or a religious organization fortifies their self-esteem" (Millon 2011, 499). In addition, "they believe that by following the rules of their organization, no one can fault and punish them. They do 'what they are told to do'" (Millon 2011, 499). The organization provides structure and a path to follow. Atta's role in al Qaeda may have served this purpose.

Another possible explanation for Atta's transformation may be found in the concept of the dependent personality. There is not much evidence of this in Atta, though the fact that he sat on his mother's lap until he went to college may indicate an unusually dependent relationship. How might this have contributed to Atta's becoming a terrorist?

Atta, who appeared to flounder during his adult years, may have replaced his attachment to his mother with a dependent attachment to Osama bin Laden. Millon articulated just how significant such attachments can be for a severely dependent personality. The most relevant subtype is what Millon labeled the "selfless dependent":

> [Such people] merge themselves totally with another such that they lose themselves in the process. These dependents willingly give up their own identity as independent human beings to acquire a more secure sense of significance, identity, emotional stability, and purpose in life .... And as their own sense of self becomes a less significant part of their being, whatever they do is done almost entirely in the service of extending the status and significance of another, be it a person or an institution.
>
> (1996, 339)

In following the dictates of bin Laden and al-Qaeda, perhaps Atta had to submerge his identity to experience a sense of significance, purpose, and belonging. This would make sense of the change from being "so sensitive that he could become emotional if an insect was killed," to becoming a mass murderer. Millon stated that through their fusion with another, dependent people "may act at times in ways quite divergent from what has been characteristic of them" (1996, 339).

As noted, at some point Atta began acting more confident. People with dependent personalities "may exhibit an air of confidence and self-assurance, but only as it reflects the achievements and powers of the person or institution to which they are united" (Millon 1996, 339). In this case, Atta's hypothesized attachment to bin Laden allowed him to operate with confidence as "the boss" of the mission.

Besides understanding Atta's transformation to a terrorist through the lens of a puritanical compulsive and a selfless dependent personality, there is a third option that may be relevant. Millon noted that sometimes an avoidant personality can deteriorate into a variant of the sadistic personality disorder that he called "spineless" (in Millon and Davis 1998, he labeled this subtype the "spineless psychopath"; in Millon 2011, this became the "spineless denigrating personality type"). These people are not at all sadistic or psychopathic by nature, but rather "deeply insecure and irresolute, often fainthearted and cowardly" (Millon 2011, 637). According to Millon, "Much of their anger derives from their low status in early schooling and their subsequent minimal life achievements" (2011, 637). This fits what we know of Atta's life. These personalities, "commit violent acts as a means of overcoming their fearfulness .... They are basically insecure ... cowardly personalities whose venom and cruelty is essentially a counterphobic act" (Millon 2011, 638).

Another noteworthy feature of such people is that they often "join militaristic groups that search for a shared scapegoat—a people or ethnic population that has been 'sanctioned to hate'" (Millon and Davis 1998, 166). This is exactly what Atta chose to do. In this conceptualization, Atta's terrorist act was his attempt to overcome his anxiety and fearfulness by demonstrating that he was not afraid of violence and death.

4 | Discussion

In seeking to comprehend Atta's transformation from being shy and gentle to cold-blooded and deadly, three potential pathways have been identified through Millon's model of personalities.

The first pathway focused on Atta's compulsive traits. The primary subtype discussed was the puritanical compulsive, which is a blend of compulsive and paranoid traits. In addition, traits of the bureaucratically constricted subtype may have been a factor. In this conceptualization, Atta's strict morality—morality that ordinarily would have prevented him from being violent—became fused with paranoid thinking and bin Laden's influence. This combination of factors convinced Atta that a higher morality could be served through terrorism.

The second pathway conceptualizes bin Laden's influence as a manifestation of Atta's dependent personality traits. In this view, Atta surrendered his true self due to his need for attachment to a stronger figure outside of himself. This attachment resulted in an abandonment of his identity and enabled him to act in ways that were counter to his previous self.

The final pathway explains Atta's transformation as compensating for his inner weakness by playing the part of a fearless individual. In this view, his avoidant personality sank so deeply

in its own sense of inadequacy that he sought salvation through developing sadistic personality traits. Such traits, however, ran contrary to his original self, representing a rejection of his own identity.

Because these three pathways are not mutually exclusive, Atta's dynamics may have consisted of a combination of them.

It must be emphasized that in seeking to articulate aspects of Atta's personality that may have been factors in his radicalization, this in no way constitutes an attempt to create a profile of a terrorist personality. In comparing Atta's personality to the findings of Langman (2020) regarding Osama bin Laden, for example, we see both similarities and differences. Like Atta, bin Laden exhibited both avoidant and compulsive traits. Unlike Atta, bin Laden was markedly narcissistic. He was also more sadistic and paranoid.

Though all terrorists—like all humans—have unique personalities, further research may identify commonalities or patterns. For example, one issue to be investigated is to see if terrorist leaders are more narcissistic than their followers. This may hold for bin Laden and Atta, but whether further research will confirm this as a pattern remains to be seen.

As noted previously, the purpose of this article is not to diagnose Atta, but to illustrate how personality traits—in combination with significant life stressors—can contribute to the radicalization of a terrorist. Returning to the comment by Kruglanski et al. cited above, the absence of a terrorist profile does not mean that there is an absence of personal characteristics involved in an individual's choice to commit a terrorist attack. In other words, we need to consider more than social factors to gain insight into radicalization.

This issue was highlighted by Horgan, who asked a crucial question:

> given that so many people are exposed to the presumed generating conditions for terrorism (or root causes), the triggering factors and catalysts both for religious and political mobilization, why is it that so relatively few people actually do this (even within conflict zones, let alone outside of them)? For example, more than 2 million Muslims live in Britain, many of whom are exposed to the same social conditions, backgrounds, and origins. Yet, so very few become radicalized to the point that they engage in terrorism. So how do we account for this?
>
> (2008, 83)

Part of the answer to this question may be found in personality factors. This does not mean that terrorists are “deranged” or “crazy,” but simply that they have personal vulnerabilities that interact with their life circumstances to steer them in the direction of ideological violence. This perspective helps to answer the question of why, if the root causes of terrorism affect huge numbers of people, those who become terrorists constitute a miniscule minority. An understanding of personality dynamics and disorders can shed valuable light on the phenomenon of radicalization.

5 | Limitations

First, knowledge of Atta is limited. He did not keep a journal in which he recorded his thoughts, feelings, and personal struggles. Constructing someone's personality from external sources poses significant challenges. As a result, the discussion here is speculative.

Second, because this is a single-case study, it has limited generalizability. Even if the analysis of Atta is valid, it does not necessarily apply to other terrorists. In fact, it should be noted that he was markedly different from his fellow attackers. This does not mean that the personalities of the others played no part in their radicalization, only that the dynamics were presumably different.

5.1 | Future Directions

It is recommended that the exploration of the personalities of a range of different types of terrorists be conducted to examine the possible role of their personalities in their decisions to engage in ideological violence. This range should include ideological variation (e.g., jihadist, white supremacist, etc.) as well as lone-attackers and group-affiliated attackers.

Unfortunately, this type of analysis requires a level of knowledge about the perpetrators that is often not available. This limits the opportunities to conduct meaningful assessments of personality traits to those attackers who are particularly notorious, or those who left behind personal materials such as journals, diaries, letters, or other documents that provide an intimate view of their psychological functioning.

In addition, however, Millon created a range of personality assessments that could be utilized in psychological evaluations or for research purposes with terrorists or former terrorists. The information obtained from these instruments would add another layer to our understanding of potential factors that contribute to the radicalization process.

6 | Conclusion

The more that ideological attackers can be understood as products of their unique personalities in combination with their life circumstances, the better we can understand the varied pathways to radicalization and how we might intervene to shift people away from the path of violence.

Conflicts of Interest

The author declares no conflicts of interest.

Data Availability Statement

The author has nothing to report.

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