5-12-2022

Aggression in Session: Defining, Conceptualizing, and Treating Aggression

Tyler Greenough

Aggression in Session: Defining, Conceptualizing, and Treating Aggression

Ty Andrew Greenough

A research project submitted to the Graduate Faculty of

JAMES MADISON UNIVERSITY

In

Partial Fulfillment of the Requirements

for the degree of

Educational Specialist

Department of Graduate Psychology

May 2022

FACULTY COMMITTEE:

Committee Chair: Debbie Sturm, Ph.D.

Committee Members/Readers:

Renee Staton, Ph.D.

Joseph Leblanc, Ph.D.

Table of Contents

Abstract iii

Introduction 1

Defining Aggression 4

Categorization of Aggression 6

- **Impulsive vs. Instrumental** 6
- **Automatic vs. Controlled** 7

Contributors to Aggression 8

- **Biological Components** 9
- **Substance Interaction** 10
- **Psychological Diagnoses** 11

Conceptual Considerations for Aggression 13

- **Functional Aspects** 13
- **Self Esteem** 15
- **Emotional Regulation** 17
- **Empathy** 21

Recommendations 22

References 25

Abstract

Within the counseling profession, there is a great deal of interaction with aggression affecting both clients and the systems affecting clients. Therefore, it is vital that counselors be adequately prepared to work with various presentations of aggressive behavior. Aggression is defined, categorized based on common historical delineations, and summarized from a multi-axis continuum perspective. Contextual factors are considered such as the role of hormones, neurotransmitters, varying substances, and a wide range of diagnoses. Aggression is then conceptualized from a functional lens and explored based upon a need fulfillment model. Treatment practices such as building self-esteem, increasing emotional regulation, and developing empathy are explored in their efficacy for aggression-related treatment. Recommendations for practice are discussed.

Introduction

Violence and aggression create a significant impact on the field of public health and safety (Rutherford et. al., 2007; Ferguson & Kilborn, 2009). Violence and some forms of aggression are functionally regarded as antisocial and, in various cultures, have varying degrees of societal acceptance (Archer, 2006). Aggression might serve a function for an individual, especially in early, primitive society, but using aggression as a means to various ends largely remains outdated and costly to an individual and others (Walby, 2013). Despite such a significant impact on various healthcare and societal systems, there seems to be a lack of understanding or empathy for those who commit acts of violence and aggression.

Within the animal kingdom, aggression has quite a few functions. It can be useful in securing and maintaining territory, resources, or mates (Schaffner & French, 1997; Sasahara et. al., 2012). It can aid animals in protecting themselves or their offspring from predators or other threats (Wiedenmayer, 2009). Each of these aforementioned outcomes would give an animal an adaptive advantage and increase the likelihood of its species' survival. Though many people fear acts of aggression or physical violence from animals, they often fail to consider various species' adeptness in resolving conflicts through the communication of threats such as posturing, vocalizations, displays of harm-inducing bodily structures, the release of chemicals, or changes in coloration (Petit & Thierry, 1994).

Throughout human history, aggression has been a useful, adaptive behavior for humans that lived in small, tight-knit groups. Aggression and displays of threats were instrumental in mate selection, security of offspring and tribe members, and the overall

survival of our species (Buss & Shackleford, 1997). As time progressed and humans developed, humans became increasingly socially adept, established clearer manners of communication, and developed culture, all of which made survival easier and rendered many functions of human aggression obsolete (Walby, 2013). Aggression became less advantageous, most notably at the group level. The argument can be made that aggression of the social variety plays an adaptive role in socialization and social control (e.g., Tedeschi & Felson, 1994); aggression on the violence end of the spectrum remains primarily maladaptive. Even when aggressive behavior achieves the intended outcomes, it often is only useful in the immediate situation and involves multiple consequences in the long term (DeWall et al., 2011). Despite a reduction in the utility of aggression in the present age, it persists. Therefore, mental health professionals must understand the functions of human aggression, as many of the associated long-term consequences coincide with mental health treatment and larger systems.

Clinically, aggression and violence are also common symptoms of various mental disorders that counselors are frequently required to identify, evaluate, and treat. Aggression can present in a variety of psychological disorders such as antisocial and borderline personality disorders, attention-deficit hyperactivity disorder, autism, conduct and oppositional defiant disorders, intermittent explosive disorder, post-traumatic stress disorders, or schizophrenia (Fitzpatrick et., al 2016; Pringsheim et. al., 2015; Dyer et. al., 2009; Praag, 2001). Aggression also plays a role in other sorts of conditions such as dementia or substance abuse (Alcorn et al., 2013: Maniglio, 2017). Each disorder, however, tends to exhibit varying unique constellations of aggressive behavior.

Aggression can involve a variety of consequences for those exhibiting it. People displaying aggression frequently might find it difficult to manage intense emotional states, such as anger or sadness. Consistent use of aggression can lead to ruptures in relationships, difficulty with social adjustment, or legal consequences. Upon the straining or ending of relationships for aggressors, unchecked aggression can lead to increased stress and feelings of isolation, which might negatively exacerbate the problems at hand (Crick, 1996). In addition, experiencing aggression or violence from friends, family members, or partners has detrimental effects on the victims, even when an aggressor does not view those experiences as harmful (Williams et al., 2012).

As a new counselor, it can be confusing to make sense of aggression. Witnessing aggression in session might also create a variety of reactions for new counselors that could interfere in the treatment of clients. Experiences of witnessing aggression across the lifespan and in multiple settings inspired the author of this work to explore more of the nature of aggression and to understand what approaches might be helpful in conceptualizing and treating aggression within the context of mental health counseling. It is important to understand the underpinnings of aggression before attempting to alter it in another by familiarizing oneself with frameworks and tools for responding to aggression in work with clients. Well-rounded comprehension can guide constructive and precise adjustment in treatment, with considerations of nuance between different variables such as setting, population, or approach.

This work focuses on reviewing the present literature to summarize various conceptualizations regarding the identification and formation of aggression. It then explores various constructs relating to the function and sustainment of aggressive

behaviors and their relationships to various emotional states and self-schemas. Lastly, it outlines potential applications to treatment practices and clinical implications.

Defining Aggression

Aggression is a complex and multifaceted phenomenon, which is demonstrated through the presence of a variety of associated factors such as motives, intentions, emotions, and the recipient (DeWall et al., 2011; Bushman & Anderson, 2001; Darjan et al., 2017). Put simply, aggression is defined as "any behavior intended to harm another person who does not want to be harmed" (DeWall et al., 2011, p.245). The key components of this definition involve the presence of harm towards another who lacks a desire to receive harm. This distinction is important when one considers the presence of behaviors creating harm that might be consensual or of some benefit to the recipient. Harm is not necessarily synonymous with aggression because some behaviors involving harm are prosocial (Bushman & Anderson, 2001). For example, pain caused during surgery is not considered aggression because the intention is to help, not hurt the recipient. Additionally, the recipient is likely consenting to at least some element of the harmful behavior.

Aggression exists in a variety of forms that can be both physical and nonphysical. Violence can be understood as a form of extreme physical aggression in which harm manifests as hitting, kicking, or using weapons against someone or something with the primary intention to injure or damage (Liu et. al., 2013). Non-physical forms of aggression are characterized by harming behaviors other than physical harm such as verbal aggression or relational/social aggression. Verbal aggression pertains to actions

such as name-calling, threats, yelling, or screaming. Relational/social aggression pertains to harm aimed at social aspects such as the exclusion of someone from a group, gossiping, criticism, manipulation of two people against one another, or intentionally ignoring another (Liu et. al., 2013; DeWall et al., 2011). Nonphysical aggression tends to be more subtle and less readily recognized by observers (University of Minnesota Libraries Publishing, 2015).

In order to adequately conceptualize something, it is often important to also distinguish what it is not. One important distinction is between aggression and anger. Aggression is a displayed behavior, whereas anger is an experienced emotion (DeWall et al., 2011). Often an emotional assumption of anger is inherently assumed by others to be indicative of aggressive behavior (Ohbuchi, 1987). Anger is sometimes mistaken for aggression, in that it is aimed at overcoming a target, but not necessarily through harm or destruction (American Psychological Association, n.d.). An assumption of coexisting anger should not be implied in a definition of aggression due to types of aggression (e.g., well-planned acts of revenge) that lack the initial presence of an angry emotional state (Liu et. al., 2013). For the purposes of conceptualizing aggression broadly, the assumption of the presence of a specific emotional state, like anger, should not be imperative in classifying behavior as aggression.

It is also important to make the distinction between assertiveness and aggression. Often in fields of sport or business, the word “aggressive” is used in a desirable context, when the idea that is being conveyed would be more appropriately described as assertive as it pertains to confidence or direct communication without the intention to do harm (DeWall et al., 2011). In fact, it is important to note that sometimes assertive behavior

might be mistaken for social aggression, depending upon one's subjective experience of the behavior. It may also be the case that aggression becomes the presenting behavior when an individual seeks to be assertive but lacks the awareness or communication skills to express their feelings and needs (Darjan et al., 2017).

Categorization of Aggression

Impulsive vs. Instrumental

Aggression has been historically typified and understood along an impulsive/instrumental dichotomy. Impulsive aggression is defined by characteristics such as abruptness, affectively laden, angry, and reactionary. It is associated with "hot-headed" responses to provocation or perceived threats. Instrumental aggression is defined by characteristics such as being goal-oriented, premeditated, and calculated (Kemp et al., 2020). It is associated with "cold-blooded" behaviors with specific ends. The primary distinguishing differences between these two types of aggression are the extent of thought and planning involved, the primary goal of the behavior, and the presence or absence of anger (Bushman & Anderson, 2001).

The impulsive vs instrumental dichotomy is limited in distinguishing distinct motives to either type of aggression. In many scenarios, the exact same motive can be the driver for either type of aggression, different motives can drive the same aggressive behavior, and aggressive behaviors can be composed of varying concoctions of characteristically instrumental or hostile aggression features (Geen, 1995). In the clinical realm, aggressive qualities of negative affect and impulsivity are more common, whereas

aggression with premeditated and instrumental nature is often witnessed in the forensic setting (Rosell & Siever, 2015).

Automatic vs. Controlled

There are some who believe that this dichotomy between impulsive aggression and instrumental aggression is incomplete, due to the presence of confounding examples of aggression that have multiple motives and varying degrees of automatic and controlled features (Bushman & Anderson, 2001). This is exemplified by situations in which the same motives can motivate both types of aggression, different motives result in the same aggressive behavior, and singular examples of aggressive behavior involve both hostile and instrumental aggression (Geen, 1995). Thereby, a more expansive categorization is needed to be precise in defining aggression.

Thanks to insights into automatic and controlled information processing, it is somewhat easier to categorize the key features of a controlled process. Those 4 key features are "(a) conscious intention of what the control will accomplish, (b) a sense or feeling of control, (c) an expenditure of effort in the control action, and (d) a (closed-loop) monitoring of the control output" (Wegner & Bargh, 1998, p. 463). Wegner and Bargh (1998) also articulated that an automatic process is not the exact opposite of a controlled one. Therefore, any existing process without all four aforementioned features would be, in part, an automatic process. A fully automatic process lacks all four of those features and is instead characterized by three other features: (a) autonomy (e.g., runs by itself without constant monitoring), (b) quickness, and (c) efficiency (e.g., requires minimal attention capacity). Therefore, one can conceptualize automatic vs-controlled processes along a continuum, which adds another dimensional criterion for classifying

aggression (Bushman & Anderson, 2001). The presences of automatic and controlled processes confound the original dichotomy of impulsive and instrumental forms of aggression by the presence of examples such as hostile aggression with controlled features and instrumental aggression with automatic features (Bushman & Anderson, 2001).

There is still a continued need for exploration into the nuances of the classification of aggression for the purposes of deeper understanding and resolution of conflicting conceptualizations. Given the widely varied conceptions of aggression and the several diverse characteristics and considerations of category, it might be beneficial for counselors to consider aggression not through binary categories but rather as endpoints on a continuum of behavior that considers a variety of factors such as how a behavior is exhibited, to what end, by what it was motivated by (Bushman & Anderson, 2001). The new counselor might also benefit from knowing various factors that have been associated with aggression. In understanding such relationships, a new counselor would benefit from better unifying their conceptualization of their client's aggression. In the next session, a variety of contributors to aggression are examined.

Contributors to Aggression

Now that aggression can be understood as existing along multifaceted continua, it is important to acknowledge a set of documented contributing factors and other correlations before beginning to therapeutically conceptualize and treat aggression. This section of the work examines various facets of biopsychosocial context for the purposes of acclimating counselors to currently understood relationships and trends.

Biological Components

Hormones have been linked to having interactions with the facilitation of aggression. Higher levels of cortisol and testosterone influence aggression and related factors such as psychopathy in an interdependent manner; however, this relationship is complex, and likely depends on factors such as age, gender, and degree of trait aggression and psychopathy (Rosell & Siever, 2015). Additionally, it has been demonstrated that women receiving testosterone have been shown to begin exhibiting aggressive behaviors (Kuepper et. al., 2010).

A few neurotransmitters have been linked to aggressive behavior, typically when they are excessive or deficient. Serotonin levels in both excess and deficiency have been correlated with aggression. Too much serotonin has been shown to inhibit Monoamine Oxidase Inhibitors (MAOs) causing them to continue metabolizing excessive levels of serotonin. This can lead to continued overproduction of serotonin, which can create altered mental states (Godar et al., 2016). Low serotonin has been demonstrated to be correlated with depression, violence, and suicide (da CunahBang et.al., 2016). Overproduction of dopamine has been demonstrated to be involved in aggression such as in persons with schizophrenia. Low dopamine levels are commonplace in patients with Parkinson's whose treatment is targeted with the use of dopamine-enhancing medications (Bruno et.al., 2016). Further research is necessary to establish the complex relationships between various chemical messengers and their role in aggression.

Substance Interaction

A wide variety of substances can lead to aggression or violence. More often than not with substance usage, the inciting contributors to aggression are the pharmacological effects of consuming substances. However, for some, withdrawal symptoms incite aggression motivated by obtaining a substance or coping with unpleasant withdrawal symptoms (Alcorn et al., 2013). Alcohol is a common initiator of aggression as it can lower repressive barriers of typically controlled emotions, including rage (Maniglio, 2017). Hallucinogens from substances such as mescaline, peyote, 3,4-methylenedioxymethamphetamine, or ecstasy, and lysergic acid diethylamide (LSD) can precipitate terrifying, commanding, and frightening experiences that result in aggressive or violent behavior. Phencyclidine (PCP) not only makes the user feel invincible and impervious to pain but also can cause powerful, violent behaviors as severe as homicide (Thiessen et al., 2018). Anabolic steroids, commonly used for physical enhancement, may induce aggressive rage (Gannon & Cadet, 2019).

Even prescribed medications can generate aggressive responses as a side effect. Antidepressants, especially for children, have an increasingly documented body of research suggesting they might have a correlation to contributing to suicidal and homicidal behavior (Healy et. al., 2006). Prescriptions used to treat Parkinson's disease, like carbidopa-levodopa, can increase dopamine to excess, resulting in patients developing paranoia and aggression (Wise, 2016). It is crucial that counselors get a sense of what medications might interplay within a client’s system, especially given the breadth of substances that interact with aggression.

Psychological Diagnoses

There are a variety of specific DSM-5 diagnoses that have violent behavior as one of their distinguishing features. These include diagnoses such as bipolar affective disorder, schizophrenia, dementia-related disorders, post-traumatic stress disorder (PTSD), and acute stress disorder. Other disorders associated with childhood and adolescence, intellectual deficiencies, personality disorders, and intermittent explosive disorder are often associated with aggression or violence (Fitzpatrick et., al 2016; Pringsheim et. al., 2015; Dyer et. al., 2009; Praag, 2001). It is crucial to remember that aggression can be the product of comorbid combinations of several conditions. For example, someone with a substance use disorder and post-traumatic stress may behave aggressively as a result of alcohol consumption (Soreff et. al., 2022).

Patients with bipolar affective disorder may become excessively agitated and aggressive, especially during a manic phase. Grandiose delusions often inflate self-view while also making the individual overly demanding of others and combative to those not confirming their self-perceived greatness (Ballester et. al., 2012). Patients with schizophrenia might exhibit aggression when responding to perceived hallucinations ordering them to harm others. Various forms of dementia, such as Alzheimer's disease, have both memory deficiencies and executive function loss. Reduced executive functions make it increasingly difficult to maintain good judgment and inhibit unacceptable impulses (Lyketsos et al., 1999). This deficit accounts for some of the aggression and violence seen in long-term care facilities and in working with patients with traumatic brain injuries (Soreff et. al., 2022).

Overwhelming stress can also be an inciting event for certain individuals to become aggressive. Those with PTSD struggle through a host of symptoms that can promote potential aggression. These symptoms can include hypervigilance, flashbacks, and nightmares, often evolving to aggression. Females exposed to trauma have been shown to have higher levels of PTSD symptoms thereby increasing the risk for several indices of aggressive behavior (Wamser-Nanney, et. al., 2021).

In addition, various childhood diagnoses, such as conduct disorder or attention-deficit/hyperactivity disorder (ADHD), have the potential to result in aggressive behavior. Disorders along the autism spectrum also may have aggressive features, typically due to communication difficulties, impulsiveness, and low tolerance of frustration (Saylor & Amonn, 2016). Some persons with intellectual disabilities may resort to aggression or violence when confronting difficult tasks and situations (Davies & Oliver, 2016). Ultimately, there is a wide variety of aggression that may be related to a multitude of various diagnoses, which illuminates the need to ensure familiarity with the characteristics of disorders that can involve aggression.

Context is key when working with aggression in clients. As this work previously discussed, there is a wide variety of potential contributing factors across many domains that play varying roles in the evocation of aggression. Given that a definition for aggression has been established, it is important to begin to formulate a systematic method to conceptualize and treat clients as they work toward their goals.

Conceptual Considerations for Aggression

In summarizing some of the literature on the conceptualization and treatment of aggression, this work begins by elaborating on the functional components of aggression in conceptualization. Next, the relationship between self-esteem and aggression is investigated, acknowledging commonly believed causes of aggression. Emotional regulation is proposed as a potential component contributing to aggression. Lastly, this section touches on empathy and its relationship to aggression.

Functional Aspects

It may be beneficial to treatment to conceptualize human actions and behaviors as intended toward fulfilling a need, or in service of accomplishing a goal. Such needs are crucially important for human development and an individual's instinctual drive to satisfy them should be taken into account (Alstot & Alstot, 2015). It is of the utmost importance to identify the functions of behavior so that counselors might make more efficient educational and interventionist decisions (Darjan et al., 2017). From this lens, aggression is an attempt to fulfill a need or attain a goal. Educators and therapists are charged with identifying the function of aggressive behaviors and aiding their clients in replacing the maladaptive behaviors with appropriate, socially acceptable ones (Long et al., 2014).

From a survival standpoint, aggressive behaviors keep an individual safe if there is a present threat of danger. Typical behavioral responses might include threats or engagement of violence via self-defense or preemptive strike (Long et al., 2014). Identifying situational characteristics that might signal and/or be assessed as potentially dangerous to a person are of vital importance to survival. This skillset, when maladaptive, has also been shown to be an important determinant in automated types of aggression

behaviors (Crick & Dodge, 1996). These moments of perceived imminent danger or threat signal the human body to resort to an automatic, unconscious, and predictable response, generating the body's well-known types of responses to stress: fight, flight, or freeze (Kunimatsu & Marsee, 2012).

There are a variety of interpersonal and intrapersonal functions for aggression from a functional perspective. Four categorizations of functions: Avoidance/Escape, Power, Punishment/Revenge, and Social Identity Protection, have been proposed and have gained some traction within the aggression literature (Ohbuchi, 1987; Long et al., 2014). They connect the previously stated stress reactions of fight, flight, or freeze to correspond to the four categories of specific needs. Freeze and flight enable escape or avoidance of stimuli, while flight might serve various functions: the pursuit of attention, the affirmation of power, or the seeking of revenge (Long et al., 2014).

Aggression can be generated as an avoidance response to an aversive internal stimulus. Stimuli examples include uncomfortable emotional states such as frustration, annoyance, pain, and so on. Typically, the extent of the response corresponds to the perceived severity of the stimulus (Carver et. al., 2008). Aggression can also be used as a means of coercion. If an individual lacks alternative means or perspective by which they might encourage another towards their desired end (i.e., bartering or persuasion), they might utilize aggression as a means to a specific end (Ohbuchi, 1987).

Aggression might also be functional as punishment if directed toward a transgressor. In this functional form, aggression is motivated by the restoration of social justice and the compensatory action of revenge. This form of aggression’s extent and intensity are determined by the perceived moral wrongdoing of the transgressor. This

function of aggression might be perceived as socially appropriate depending upon the identified role of the person delivering the retribution and the social value of the infraction committed. In this form, some believe that aggression is justified as sanctioned conduct against the immoral (Ohbuchi, 1987). It might also be the case that aggression can be evoked when someone's social identity is threatened. This form of aggression is also mediated by social cognition, such as an attribution of intent to a harm-doer. (Ohbuchi, 1987)**.** Suttom and colleagues (1999) suggested that impression management motives might be involved in some cases of aggression because the presence of an audience or the acknowledgment of one has been shown to contribute to retaliative aggression.

Self Esteem

The literature regarding the relationship between self-esteem and violence has been a topic of debate for the last 50 years. Oftentimes, conventional wisdom suggests that low self-esteem is an important cause of violence (Sprott & Doob, 2000). Contrary to that conventional perspective, the opposing view that aggression might have more to do with over-inflated self-esteem has become increasingly evident (Tice, 1993). A common assumption is that aggression and violence are used as tools to enhance one's self-esteem through outwardly harmful means such as domination, slander, or manipulation. This is demonstrated in child-adult interactions in which, after a child experiences bullying, an adult responds to a child's distress with "they are just jealous of you" or "they just have low self-esteem." Embedded within this assumption is the idea that people with low self-esteem are "strongly oriented toward self-enhancement because they want to gain more of what they lack" (Baumeister et al., 1996, p.13).

In reality, strong orientations toward self-enhancement or maintenance of self-esteem is characteristic of people with high levels of self-esteem (Baumeister et al., 1989) Additionally, those with low self-esteem tended to demonstrate weak or non-existent motivation to increase their self-esteem (Tice, 1993). Those with low self-esteem seem to be ambivalent about the alteration of their self-esteem and have been known to avoid circumstances that might raise their self-esteem (De La Ronde & Swann, 1993). This avoidance of alteration might stand for a few reasons. These people seek to protect themselves from negative feedback (Baumeister et al., 1989). They do not enjoy nor trust flattering or enhancing feedback (Swann, 1987). Or, lastly, they lack the motivation to acquire accurate feedback (Sedikides, 1993).

Resistance to improving self-esteem as a defense mechanism preserves the status-quo by defending one's irrational beliefs, thereby maintaining an impression of predictability and controllability of events. Each instance of verified low self-worth naturally exemplifies an unconscious self-experiment to reality test self-beliefs (Darjan et al., 2017). By acting in accordance with an expected outcome, the anticipated unpleasant event is provoked, ceasing the anticipatory anxiety, and confirming and reinforcing the expectancies and behaviors for further negative outcomes. Therein lies a counselor's opportunity for intervention: interrupting the cyclical pattern, changing a client's expectations, and inviting them into new ways of being (Long, Wood, & Fecser, 2001).

A person with a highly favorable opinion of themselves, however, will be inclined to seek out risky situations to prove his or her merit. Acts such as seeking out fights with dangerous individuals serve as a dubious strategy for gaining or reinforcing esteem, and is likely to appeal only to individuals with irrationally high confidence. (Donnellan et. al.,

2005). This claim is bolstered by an interdisciplinary review of aggression, crime, and violence that further contradicted the view that low self-esteem is an important cause. Threatened egotism, or inflated, favorable views of oneself, under threat, however, has shown to be a contributing factor in retaliatory aggression. It is proposed that the disputing of a person's self-concept by another person or circumstance is incredibly distressing for someone with very high or inflated self-esteem (Baumeister et. al., 1996). In order to cope with their distress, they choose not to engage with challenging ideas of self-concept and instead direct anger and aggression outward as a way of avoiding a downward alteration of the self-concept. By and large, people with inflated, unstable, or tentative beliefs about their superiority are often the most prone to engaging with threats and thereby evolving into violence (Baumeister et. al., 1996). Treatment on this end of the self-esteem continuum is similar to treating low self-esteem in that a counselor might assess the client's perception and interpretation of the events (Tice, 1993). Then, the counselor can identify the function of the behavior and the underlying need. Lastly, the counselor should also focus on strengthening the fragile self-esteem of clients with egoistic tendencies (Bosson et. al., 2008).

Emotional Regulation

An individual's self-control failures frequently predict aggression and, conversely, building self-control decreases aggression. (Kemp et al., 2020). A study has shown that the act of rumination following an anger-inducing provocation reduces self-control and increases aggression (Denson et al., 2011). Efficacy for this treatment focus is also supported by a finding articulating that neural mechanisms involved in emotion

regulation and cognitive control mediate the relationship between self-control and aggression (Denson et al., 2012).

In the continued practice of regulating emotion, it is important that the extent to which one regulates is taken into account. Both under- and over-regulated emotion has been linked to an increased likelihood of aggression (Roberton et al., 2012). Consequences of emotions that are under-regulated often involve the subsequent impediment to achieving a person's goal, whereas consequences of emotions that are over-regulated involve the depletion of an individual's resources for coping with ongoing internal and external stressors (Roberton et al., 2012).

There is a much more apparent relationship between under-regulated emotion and aggression. "Emotional under-regulation refers to when an individual fails to contain difficult emotional experiences sufficiently to continue to engage in goal-directed behaviors or inhibit impulsive behaviors" (Roberton et al., 2012, p. 74). During under-regulation of emotions, when a behavior that occurs in response to an emotion occurs, the response to that behavior is often experienced by the client as inseparable from their present emotion and a client might fail to employ the emotion regulation strategies necessary to easily control future behaviors (Gratz & Tull, 2010).

Over-regulating emotions involves an individual using emotion regulation strategies in an effort to consistently stop an emotional experience from occurring (Greenberg & Bolger, 2001). This often consists of someone avoiding certain emotional experiences via remaining unwilling to engage with particular private experiences (e.g., thoughts that activate distressing emotions) or taking steps to change the form or frequency of these experiences or the situations that bring them about (Roberton et al.,

2012). A person might also over-regulate emotions by way of the suppression of emotional expression. This entails actively attempting to inhibit ongoing emotionally expressive behavior (e.g., an individual attempting to hide signs of anger when resolving interpersonal conflict or someone trying not to show anxiety when attending a job interview) (Gross & Levenson, 1993). Overregulation of emotions might also lead to compromising decision-making processes by expending available cognitive resources (Dillon et al., 2007) or by diminishing the quality of interpersonal relationships experienced by the aggressor (Henry et al., 2008).

When considering how a counselor might build a balanced, hardy skillset of emotional regulation, one key is to ensure thorough comprehension and coverage of emotional regulation. Three particular domains have been proposed to comprise a complete and deliberate conception of emotion regulation: emotional awareness, emotional acceptance, and proficiency in a variety of emotion regulation strategies (Roberton et al., 2012).

"Effective emotion regulation requires awareness, understanding and clarity of emotional responses. Emotion states have high information value, particularly when they can be clearly differentiated from other emotion states" (Barrett et. al., 2007, p. 375). Uncomfortable or painful emotions serve to provide important information about one's values, goals, and needs (Greenberg & Bolger, 2001). Having an awareness of what an emotion is signaling can help empower people to meet their needs in a way that feels appropriate for them (e.g., a person who is aware of feeling sad is better able to get access to their need to grieve. Someone whose only awareness of themselves is a general global feeling of bad might lack the knowledge to know their need or the knowledge to know

how to helpfully utilize their emotion (Greenberg & Pascual-Leone, 2006). Greenberg and Bolger (2001) go as far as to suggest that "an inability to differentiate between emotions may be just as maladaptive as difficulties attenuating and modulating emotion experience and expression" (p.199).

Sustainable emotion regulation also requires an acceptance of emotional experiences (Berking & Znoj, 2008; Gratz & Roemer, 2004). Emotional acceptance entails nonjudgmentally encountering all emotions without expressing negative reactions to any particular emotion (Chambers, Gullone, & Allen, 2009). Willingness and a lack of hesitancy to experience both positive and negative emotions is a crucial component of effective emotion regulation as it allows the body's natural processes to enable emotions to take their course (Whelton, 2004). Accepting emotions can be difficult. Due to lived experiences, people come to "associate particular emotions with experiences such as memories, evaluations, judgments and social rules" (Greenberg, 2004, Hayes et al., 1996). Individuals may be more inclined to rely on aggression as a means of repairing or terminating difficult emotional experiences when emotion acceptance is difficult, Alternatively, someone who has difficulty accepting emotions might avoid or suppress their emotional experience and/or expression entirely (Chambers et al., 2009), which may also lead to a greater likelihood of aggressive behavior, as discussed earlier.

Lastly, effective emotion regulation should incorporate both internal experience and external behavior (Roberton et al., 2012). Variety in strategy gives an individual the tools to contain overwhelming emotional experiences in a manner that is appropriate for balancing situational demands and the attainment of long-term goals. Two key emotional regulation strategies include cognitive reappraisal and expressive suppression (Roberton

et al., 2012; Gross, 2002). Cognitive reappraisal operates primarily before an emotion is fully formed and involves the interpretation of emotionally-relevant stimuli in unemotional terms, altering automatic undesired meanings and messages attached to the situation (e.g., reducing feelings of anger about job termination by focusing on a job as an opportunity for a 'new start') (Sieverding, 2009). Expressive suppression operates after the emotional response has been generated and involves the inhibition of emotion-expressive behavior (e.g., hiding signs of anxiety about an upcoming exam from other students in the class) (Roberton et al., 2012). Both cognitive reappraisal and balanced expressive suppression are key skill sets to the development of maintaining a balance regarding boundaries and setting work hours.

Empathy

There has been some efficacy shown for the development of the client's affective empathy in the reduction of the client's desire to inflict harm and hurt others (Eisenberg et. al., 2010). Affective empathy serves as a moderating variable to the desire to inflict harm and pain on others. In addition to developing affective empathy, it might seem fitting that also improving one's general social intelligence would also be an appropriate and effective strategy for treating aggression. However, it is also important to note an important nuance. Social intelligence alone does not have the same positive effect as empathy (Björkqvist et al., 2000). The presence of empathy acts to mitigate aggression. But, when empathy is factored out, correlations between social intelligence and all types of aggression increase, while correlations between social intelligence and peaceful conflict resolution decrease (Björkqvist et al., 2000). Therefore, it is crucial that the focus of any social intelligence-building interventions include empathy, as higher social

intelligence is also linked to higher rates of indirect, social forms of aggression (Kaukiainen et. al., 1999). Specific goals for developing empathy might aim toward increasing attention to cues, reinforcing gathering more information in ambiguous situations, rethinking goals to reflect values response, expanding client's repertoire of alternatives, and changing the evaluation process of their decisions (Eisenberg et. al., 2010). More research is needed in order to better understand the relationship empathy has in moderating aggression.

Recommendations

As counselors grow and develop, it is crucial that they continually deepen their understanding of various presentations of human behavior in order to continue to ethically provide the best care that they can. As a new counselor, it can be initially difficult to get a clear sense of some of the components driving and contributing to a client's constellation of symptoms. More research and exploration are needed surrounding the extensive relationships and facets of aggression. However, these recommendations might benefit counselors by enabling them to approach aggression in a slightly more manageable way in practice.

The first recommendation is to consider aggressive behavior along a spectrum that includes characteristics such as impulsivity to instrumentalism and automatic to controlled processing. In knowing the varying dimensions and classifications of aggression, a counselor can better contextualize aggressive behavior in a client's life. In diagnosis, a counselor can better differentiate between diagnoses by having a stronger understanding of types of aggression and how they do and do not interplay with different diagnoses.

Secondly, when a counselor is conceptualizing aggression in a client's life, they might benefit from acclimating themselves to various biological, pharmacological, and psychological markers of aggressive behavior. Considering such factors might help new counselors to paint a clearer picture for the motivation and sustainment of aggressive behavior within a client's life. Understanding these will enable counselors to accurately diagnose, keeping in mind considerations for the potential of a dual diagnosis with substance abuse or other medical disorders (Scott et. al., 1998).

Next, when observing and working with aggression across a variety of populations, a counselor can arm themselves with a functional framework. Counselors are encouraged to consider functions of aggression for their clients and invite their clients to be curious about themselves from this lens. In understanding functions and needs in a client's life, a counselor can build a client's awareness of function, assess needs being met through aggressive behavior, and provide clients with alternative strategies to meet their needs.

Counselors are recommended take into consideration how a client's self-esteem might interplay with the usage of aggression and consider strengthening self-esteem through realistic self-appraisals. It is also important to note over-inflated self-esteem or inauthentic appraisals of the self might be contributing to aggressive behavior. Additionally, in working to decrease instances of aggression, a counselor might consider bolstering an appropriate balance of emotional regulation in order to appeal to clients who might be more prone to impulsive, affectively ladened forms of aggression. Lastly, counselors might benefit their clients by helping to strengthen their client's ability to empathize as a protective factor in engaging with maladaptive aggression.

Though the focus of this work was conceptual in nature, it was intended to serve as a launching point for both new and old counselors to take into consideration varying aspects and factors of aggression in the hope that they might have directions to explore with client's aggression. Self-esteem, emotional regulation, and empathy are all concepts present across a variety of client presentations Future considerations might include narrowing focuses on various developmental ages or other population characteristics in order to ascertain more specific nuances of aggression across various groups. Additionally, more exploration into aggression and its relationship to varying cultures regarding moral appropriateness or function might highlight nuances of a client's surrounding systems.

References

Alcorn, J. L., 3rd, Gowin, J. L., Green, C. E., Swann, A. C., Moeller, F. G., & Lane, S. D. (2013). Aggression, impulsivity, and psychopathic traits in combined antisocial personality disorder and substance use disorder. *The Journal of neuropsychiatry and clinical neurosciences*, 25(3), 229–232. https://doi.org/10.1176/appi.neuropsych.12030060

Alstot, A. E., & Alstot, C. D. (2015). Behavior Management: Examining the Functions of Behavior. *Journal of Physical Education, Recreation & Dance*, 86(2), 22-28. DOI: 10.1080/07303084.2014.988373

American Psychological Association. (n.d.). *aggression*. American Psychological Association. Retrieved March 13, 2022, from https://dictionary.apa.org/aggression

Archer, J. (2006). Cross-Cultural Differences in Physical Aggression Between Partners: A Social-Role Analysis. *Personality and Social Psychology Review*, 10, 133 - 153.

Ballester, J., Goldstein, T., Goldstein, B., Obreja, M., Axelson, D., Monk, K., Hickey, M., Iyengar, S., Farchione, T., Kupfer, D. J., Brent, D., & Birmaher, B. (2012). Is bipolar disorder specifically associated with aggression?. *Bipolar disorders*, 14(3), 283–290. https://doi.org/10.1111/j.1399-5618.2012.01006.x

Barrett, L. F., Mesquita, B., Ochsner, K. N., & Gross, J. J. (2007). The experience of emotion. Annu. Rev. Psychol., 58, 373-403.

Baumeister, R. F., Smart, L., & Boden, J. M. (1996). Relation of threatened egotism to violence and aggression: The dark side of high self-esteem. *Psychological Review*, *103*(1), 5–33. https://doi.org/10.1037/0033-295x.103.1.5

Björkqvist, K., Österman, K., & Kaukiainen, A. (2000). Social Intelligence − empathy = aggression? *Aggression and Violent Behavior*, *5*(2), 191–200. https://doi.org/10.1016/s1359-1789(98)00029-9

Bosson, J.K., Lakey, C.E., Campbell, W.K., Zeigler-Hill, V., Jordan, C.H., & Kernis, M.H. (2008). Untangling the links between narcissism and self-esteem: A theoretical and empirical review. *Social and Personality Psychology Compass*, 2, 1415-1439.

Bruno, V., Mancini, D., Ghoche, R., Arshinoff, R., & Miyasaki, J. M. (2016). High prevalence of physical and sexual aggression to caregivers in advanced Parkinson's disease. Experience in the Palliative Care Program. Parkinsonism & related disorders, 24, 141–142. https://doi.org/10.1016/j.parkreldis.2016.01.010

Bushman, B. J., & Anderson, C. A. (2001). Is it time to pull the plug on hostile versus instrumental aggression dichotomy? *Psychological Review*, *108*(1), 273–279. https://doi.org/10.1037/0033-295x.108.1.273

Buss, D. M., & Shackelford, T. K. (1997). Human aggression in evolutionary psychological perspective. *Clinical psychology review*, 17(6), 605–619. https://doi.org/10.1016/s0272-7358(97)00037-8

Carver, C. S., Johnson, S. L., & Joormann, J. (2008). Serotonergic function, two-mode models of self-regulation, and vulnerability to depression: what depression has in common with impulsive aggression. *Psychological bulletin*, 134(6), 912–943. https://doi.org/10.1037/a0013740

Crick, N.R. (1996). The role of overt aggression, relational aggression, and prosocial behavior in the prediction of children's future social adjustment. *Child development*, 67 5, 2317-27 .

Crick, N.R., & Dodge, K.A. (1996). Social information-processing mechanisms in reactive and proactive aggression. *Child development*, 67 3, 993-1002 .

Crick, N.R., & Grotpeter, J.K. (1996). Children's treatment by peers: Victims of relational and overt aggression. *Development and Psychopathology, 8*, 367 - 380.

da Cunha-Bang, S., Mc Mahon, B., Fisher, P. M., Jensen, P. S., Svarer, C., & Knudsen, G. M. (2016). High trait aggression in men is associated with low 5-HT levels, as indexed by 5-HT4 receptor binding. *Social cognitive and affective neuroscienc*e, 11(4), 548–555. https://doi.org/10.1093/scan/nsv140

Darjan, I., Predescu, M., & Tomiță, M. (2017). Functions of Aggressive Behaviors – Implications for Interventions. *Journal of Psychological and Educational Research*, *25*, 74–91.

Davies, L. E., &, Oliver, C. (2016). Self-injury, aggression and destruction in children with severe intellectual disability: Incidence, persistence and novel, predictive

behavioural risk markers. *Research in Developmental Disabilities*, 49-50, 291–301. https://doi.org/10.1016/j.ridd.2015.12.003

De La Ronde, C., & Swann, W. B. (1993). Caught in the crossfire: Positivity and self-verification strivings among people with low self-esteem. In R.Baumeister (Ed.), Self-esteem: The puzzle of low self-regard (pp. 147–165). New York: Plenum Press.

Denson, T.F., DeWall, C.N., & Finkel, E.J. (2012). Self-Control and Aggression. *Current Directions in Psychological Science*, *21*, 20 - 25.

Denson, T. F., Pedersen, W. C., Friese, M., Hahm, A., & Roberts, L. (2011). Understanding Impulsive Aggression: Angry Rumination and Reduced Self-Control Capacity Are Mechanisms Underlying the Provocation-Aggression Relationship. Personality and Social Psychology Bulletin, 37(6), 850–862. https://doi.org/10.1177/0146167211401420

DeWall, C. N., Anderson, C. A., & Bushman, B. J. (2011). The General Aggression Model: Theoretical extensions to violence. *Psychology of Violence*, *1*(3), 245–258. https://doi.org/10.1037/a0023842

Dillon, D. G., Ritchey, M., Johnson, B. D., & LaBar, K. S. (2007). Dissociable effects of conscious emotion regulation strategies on explicit and implicit memory. *Emotion*, 7(2), 354.

Donnellan, M. B., Trzesniewski, K. H., Robins, R. W., Moffitt, T. E., & Caspi, A. (2005). Low self-esteem is related to aggression, antisocial behavior, and delinquency.

Psychological Science, *16*(4), 328–335. https://doi.org/10.1111/j.0956-7976.2005.01535.x

Dyer, K.F., Dorahy, M.J., Hamilton, G., Corry, M.S., Shannon, M., MacSherry, A., McRobert, G., Elder, R., & McElhill, B. (2009). Anger, aggression, and self-harm in PTSD and complex PTSD. *Journal of clinical psychology*, 65 10, 1099-114 .

Eisenberg, N., Eggum, N. D., & Di Giunta, L. (2010). Empathy-related Responding: Associations with Prosocial Behavior, Aggression, and Intergroup Relations. *Social issues and policy review*, 4(1), 143–180. https://doi.org/10.1111/j.1751-2409.2010.01020.x

Ferguson, C. J., & Kilburn, J. (2009). The public health risks of media violence: a meta-analytic review. *The Journal of pediatrics*, 154(5), 759–763. https://doi.org/10.1016/j.jpeds.2008.11.033

Fitzpatrick, S.E., Srivorakiat, L., Wink, L.K., Pedapati, E.V., & Erickson, C.A. (2016). Aggression in autism spectrum disorder: presentation and treatment options. *Neuropsychiatric Disease and Treatment*, 12, 1525 - 1538.

Ganson, K. T., & Cadet, T. J. (2019). Exploring Anabolic-Androgenic Steroid Use and Teen Dating Violence Among Adolescent Males. *Substance use & misuse*, 54(5), 779–786. https://doi.org/10.1080/10826084.2018.1536723

Geen, R. G. (1995).*Human motivation: A social psychological approach*. Pacific Grove, CA:Brooks/Cole.

Godar, S. C., Fite, P. J., McFarlin, K. M., & Bortolato, M. (2016). The role of monoamine oxidase A in aggression: Current translational developments and future challenges. *Progress in neuro-psychopharmacology & biological psychiatry*, 69, 90–100. https://doi.org/10.1016/j.pnpbp.2016.01.001

Gratz, K. L., & Tull, M. T. (2010). Emotion regulation as a mechanism of change in acceptance-and mindfulness-based treatments. *Assessing mindfulness and acceptance processes in clients: Illuminating the theory and practice of change*, 2, 107-33.

Greenberg, L.S. and Bolger, E. (2001), An emotion-focused approach to the overregulation of emotion and emotional pain. J. Clin. Psychol., 57: 197-211. https://doi.org/10.1002/1097-4679(200102)57:2<197::AID-JCLP6>3.0.CO;2-O

Gross, J. J. (2002). Emotion regulation: Affective, cognitive, and social consequences. Psychophysiology, 39(3), 281-291.

Gross, J. J., & Levenson, R. W. (1993). Emotional suppression: Physiology, self-report, and expressive behavior. *Journal of Personality and Social Psychology*, *64*(6), 970–986. https://doi.org/10.1037/0022-3514.64.6.970

Healy, D., Herxheimer, A., & Menkes, D. B. (2006). Antidepressants and violence: problems at the interface of medicine and law. *PLoS medicine*, 3(9), e372. https://doi.org/10.1371/journal.pmed.0030372

Henry, J. D., Rendell, P. G., Green, M. J., McDonald, S., & O'Donnell, M. (2008). Emotion regulation in schizophrenia: affective, social, and clinical correlates of suppression and reappraisal. *Journal of abnormal psychology*, 117(2), 473.

Kaukiainen, A., Björkqvist, K., Lagerspetz, K.M., Österman, K., Salmivalli, C., Rothberg, S., & Ahlbom, A. (1999). The relationships between social intelligence, empathy, and three types of aggression. *Aggressive Behavior*, 25, 81-89.

Kemp, E.C., Boxer, P., Frick, P.J., & Frick, P.J. (2020). Treating Conduct Problems, Aggression, and Antisocial Behavior in Children and Adolescents.

Kuepper, Y., Alexander, N., Osinsky, R., Mueller, E., Schmitz, A., Netter, P., & Hennig, J. (2010). Aggression--interactions of serotonin and testosterone in healthy men and women. *Behavioural brain research*, 206(1), 93–100. https://doi.org/10.1016/j.bbr.2009.09.006

Kunimatsu, M. M., & Marsee, M. A. (2012). Examining the presence of Anxiety in Aggressive Individuals: The Illuminating Role of Fight-or-Flight Mechanism. *Child Youth Care Forum*, 41, 247-258.

Liu, J., Lewis, G., & Evans, L. (2013). Understanding aggressive behaviour across the lifespan. *Journal of psychiatric and mental health nursing*, 20(2), 156–168. https://doi.org/10.1111/j.1365-2850.2012.01902.x

Long, N. J., Fecser, F., Morse, W. C., Newman, R. G., & Long, J. E. (2014). *Conflict in the classroom*. Austin: Pro-Ed.

Lyketsos, C. G., Steele, C., Galik, E., Rosenblatt, A., Steinberg, M., Warren, A., & Sheppard, J.-M. (1999). Physical aggression in dementia patients and its relationship to depression. *American Journal of Psychiatry*, 156(1), 66–71. https://doi.org/10.1176/ajp.156.1.66

Ohbuchi K. (1987). Shinrigaku kenkyu : *The Japanese journal of psychology*, 58(2), 113–124. https://doi.org/10.4992/jjpsy.58.113

Petit, O., & Thierry, B. (1994). Aggressive and peaceful interventions in conflicts in Tonkean macaques. *Animal Behaviour*, 48, 1427-1436.

Praag, H.M. (2001). Anxiety/aggression - driven depression A paradigm of functionalization and verticalization of psychiatric diagnosis. *Progress in Neuro-Psychopharmacology and Biological Psychiatry*, 25, 893-924.

Pringsheim, T., Hirsch, L., Gardner, D.M., & Gorman, D.A. (2015). The Pharmacological Management of Oppositional Behaviour, Conduct Problems, and Aggression in Children and Adolescents with Attention-Deficit Hyperactivity Disorder, Oppositional Defiant Disorder, and Conduct Disorder: A Systematic Review and Meta-Analysis. Part 1: Psychostimulants, Alpha-2 Agonists. *The Canadian Journal of Psychiatry*, 60, 42 - 51.

Roberton, T., Daffern, M., & Bucks, R. S. (2012). Emotion regulation and aggression. Aggression and Violent Behavior, 17(1), 72–82. https://doi.org/10.1016/j.avb.2011.09.006

Rosell, D. R., & Siever, L. J. (2015). The neurobiology of aggression and violence. *CNS Spectrums*, *20*(3), 254–279. https://doi.org/10.1017/s109285291500019x

Rutherford, A., Zwi, A. B., Grove, N. J., & Butchart, A. (2007). Violence: a priority for public health? (part 2). *Journal of epidemiology and community health*, 61(9), 764–770. https://doi.org/10.1136/jech.2006.049072

Sasahara, K., Cody, M.L., Cohen, D., & Taylor, C.E. (2012). Structural Design Principles of Complex Bird Songs: A Network-Based Approach. *PLoS ONE*, 7.

Saylor, K. E., & Amann, B. H. (2016). Impulsive Aggression as a Comorbidity of Attention-Deficit/Hyperactivity Disorder in Children and Adolescents. *Journal of child and adolescent psychopharmacology*, 26(1), 19–25. https://doi.org/10.1089/cap.2015.0126

Schaffner, C.M., & French, J.A. (1997). Group size and aggression: 'recruitment incentives' in a cooperatively breeding primate. *Animal Behaviour*, 54, 171-180.

Scott, H., Johnson, S., Menezes, P., Bindman, J.P., Thornicroft, G., Marshall, J., Bebbington, P.E., & Kuipers, E. (1998). Substance misuse and risk of aggression and offending among the severely mentally ill. *British Journal of Psychiatry*, 172, 345 - 350.

Sieverding, M. (2009). 'Be Cool!': Emotional costs of hiding feelings in a job interview. *International Journal of Selection and Assessment*, 17(4), 391-401.

Soreff SM, Gupta V, Wadhwa R, et al. Aggression. [Updated 2022 Jan 11]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2022 Jan-. Available from: https://www.ncbi.nlm.nih.gov/books/NBK448073/

Sprott, J. B., & Doob, A. N. (2000). Bad, sad, and rejected: The lives of aggressive children. *Canadian Journal of Criminology*, 42(2), 123-133.

Sutton, J., Smith, P., & Swettenham, J.A. (1999). Social cognition and bullying: Social inadequacy or skilled manipulation? *British Journal of Development Psychology,* 17, 435-450.

Tedeschi, J. T., & Felson, R. B. (1995). *Violence, aggression, & coercive actions*. American Psychological Association.

Thiessen, M. S., Walsh, Z., Bird, B. M., & Lafrance, A. (2018). Psychedelic use and intimate partner violence: The role of emotion regulation. *Journal of psychopharmacology* (Oxford, England), 32(7), 749–755. https://doi.org/10.1177/0269881118771782

Tice, D. M. (1993). The social motivations of people with low self-esteem. In R.Baumeister (Ed.), Self-esteem: The puzzle of low self-regard (pp. 55–85). New York: Plenum Press.

University of Minnesota Libraries Publishing. (2015). In *Principles of Social Psychology* (pp. 415–419). essay, Open Textbook Library.

Walby, S. (2013). Violence and society: Introduction to an emerging field of sociology. *Current Sociology*, 61(2), 95–111. https://doi.org/10.1177/0011392112456478

Wamser-Nanney, R., Walker, H. E., & Nanney, J. T. (2021). Trauma Exposure, Posttraumatic Stress Disorder, and Aggression Among Civilian Females. *Journal of interpersonal violence*, 36(17-18), NP9649–NP9669. https://doi.org/10.1177/0886260519860894

Wegner, D. M., & Bargh, J. A. (1998). Control and automaticity in social life. In D.Gilbert, S.Fiske, & G.Lindzey (Eds.),*The handbook of social psychology* (pp. 446–496). New York: McGraw-Hill.

Wiedenmayer C. P. (2009). Plasticity of defensive behavior and fear in early development. *Neuroscience and biobehavioral reviews*, 33(3), 432–441. https://doi.org/10.1016/j.neubiorev.2008.11.004

Williams, C., Richardson, D. S., Hammock, G. S., & Janit, A. S. (2012). Perceptions of physical and psychological aggression in close relationships: A Review. *Aggression and Violent Behavior*, 17(6), 489–494. https://doi.org/10.1016/j.avb.2012.06.005

Wise J. (2016). Antidepressants may double risk of suicide and aggression in children, study finds. *BMJ (Clinical research ed.)*, 352, i545. https://doi.org/10.1136/bmj.i545