On the Clinical Applications of the General Aggression Model to Understanding Domestic Violence


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“It just seems to happen the same way over and over. It usually happens on the same days of the week and follows the same pattern. He will come home drunk and I will say something and he will get angry and things escalate from there. Before you know it he has hit me and I am calling the Police. I know if I don’t respond a certain way or just walk away things will be different, but he pushes my buttons and then I push his and it all seems so inevitable, so hard to stop the pattern from repeating ...”

Domestic violence victim AB during counselling.

A key aim of this book is to shed light on domestic violence (DV) by examining ways that relevant models of aggression and violence can help us to understand this phenomenon. Two key approaches have been targeted – the psychodynamic perspective, which emphasises the drive-related and motivational aspects of aggressive behaviour (see Chapter 4), and the social cognitive approach, which emphasises the activation of learned patterns of aggressive behaviour when appropriate environmental triggers are present. In terms of the latter, the most current and most comprehensive model is the General Aggression Model (GAM) of Anderson and Bushman (2002a), the focus of this chapter.

The GAM, although just over a decade old, is now supported by a large body of evidence suggesting it can explain a wide range of aggressive phenomena (for reviews see Anderson & Barlett, in press; Anderson & Groves, 2013; DeWall & Anderson, 2011), as well as a wide range of violent behaviours (DeWall, Anderson & Bushman, 2011; Gilbert & Daffern, 2011).

More importantly, the GAM appears to have utility in both explaining domestic violence and formulating practical remedies for it. For example, the GAM would emphasise in the case of AB (above) the factors within the perpetrator that predisposes them to aggression, the triggers and cues in the environment that would activate existing patterns of violent behaviour, and factors that would increase the likelihood of aggression in this instance, such as high levels of emotional arousal and the disinhibiting role of alcohol. Importantly, from a clinical
perspective, the GAM would support particular types of interventions such as actively breaking existing patterns of behaviour, reducing triggers and cues for violence, providing opportunities for the perpetrator to think through their response without ‘losing face’, and changing the situation early in ways that minimise the impact of factors such as alcohol.

The key focus within this chapter will be the clinical applications of the GAM to domestic violence. In it we will describe theories of neural connectivity and behaviour that underpin the GAM and theories of aggression that have pre-dated and been incorporated into the GAM. The GAM itself will be described in detail, along with insights into how the GAM can assist practitioners to understand and respond to instances of domestic violence. Before then, however, we need to be clear about how aggression, violence and domestic violence will be defined in this chapter.

Defining aggression and violence

Aggression

Producing a definition of aggression that captures most behaviours that should be considered instances of aggression, that excludes behaviours which should not, and that is also parsimonious, is a very difficult task (Baron & Richardson, 1994; Berkowitz, 1993; Geen, 2001; Krahe, 2013). However, at its simplest level, aggression involves behaviours intended to hurt others. To this end, we will use the definition formulated by Anderson and Bushman (2002a) that aggression is “any behavior directed toward another individual that is carried out with the proximate (immediate) intent to cause harm” and further specify that “the perpetrator must believe that the behavior will harm the target, and that the target is motivated to avoid
the behaviour” (p. 28). The latter is to rule out consensual harm such as the hurt caused by dentistry.

A key point is that aggression is a behaviour, not a feeling such as anger nor a hostile mindset. Aggression is an act (Warburton, 2013; Warburton & Anderson, in press). Also key is that the nature of the harm is not restricted to physically hurting another (*physical aggression*), but may also involve other modes of harm such as hurting another with words (*verbal aggression*), hurting a person’s relationships (*relational aggression*) or hurting a person from a distance (*indirect aggression*) (Warburton, 2013; Warburton & Anderson, in press). This seems to accord better with more recent conceptualisations of domestic violence that emphasise multiple forms of harm to the victim, not just physical violence. A third key point is that the act need not succeed in order to be considered aggression; shooting a gun at someone with the intent to kill is an act of aggression, even if the shot misses the target.

When conceptualising aggression it is also important to distinguish the function of the aggression (Warburton & Anderson, in press). One way to do this is to locate aggressive acts on three dimensions – the “degree to which the goal is to harm the victim versus benefit the perpetrator; the level of hostile or agitated emotion that is present; and the degree to which the aggressive act was thought-through” (Warburton & Anderson, in press; see also Anderson & Huesmann, 2003; Bushman & Anderson, 2001). Some aggressive acts are carried out simply to benefit the perpetrator (for example, a violent robbery), whereas others are motivated primarily by a desire to hurt the victim (for example, beating an unfaithful partner). Aggression may be fuelled by high levels of anger and arousal (such as DV that occurs during a fight) or may be cold and instrumental (enacted in the absence of strong emotion). Sometimes aggressive responses are automatic and reflexive (such as instinctively responding
with aggression when one’s children are threatened), but aggression can also be planned and thought-through (such as carefully planning revenge against a violent partner).

**Violence**

Unfortunately, the term aggression is often, and incorrectly, used interchangeably with the term violence, leading to considerable confusion among researchers, public policy-makers, and the general public (Warburton & Anderson, in press). However, whereas aggression refers to a wide group of acts where the levels of harm can range from mild to extreme, the term violence refers only to a smaller subset of aggressive behaviours that are intended to cause harm extreme enough to require medical/therapeutic attention or to cause death (Anderson & Bushman, 2002a; Warburton & Anderson, in press). Many psychologists extend this definition to include acts that can cause severe emotional harm (Warburton & Anderson, in press), a factor relevant to recent formulations of domestic violence. Thus, all violent behavior is aggression, but most aggression is not violence. In the domestic situation the same principles apply: mild and mild-moderate acts of aggression would be seen as more within the normal range of behaviours between family members, but aggressive acts that cause moderate to extreme hurt/harm would be seen as within the spectrum of violence.

**Domestic violence**

We will not give a highly detailed definition of domestic violence here – the Introduction and previous chapter note various approaches and provide the definitions used in this book – but instead merely highlight that, for the purposes of this chapter, domestic violence includes behaviours that meet the criteria for violence noted above, and which form an ongoing
pattern of abuse to the victim. The perpetrators may be male or female, and the same principles apply to both heterosexual and homosexual intimate relationships.

Also relevant to our definition of domestic violence is the definition of intimate partner violence (IPV). Definitions and formulations of IPV have been also well covered earlier in this book, but for the purposes of this chapter we take particular note of the four WHO (2010) categories of IPV. Physical violence includes all undesired physical contact (e.g., pushing, hitting, hair pulling, beating, burning). Sexual violence refers to any coerced sexually-related act (e.g., taking revealing photographs or sexual intercourse). Psychological abuse represents threats to harm the victim, take away the children, intimidation (e.g., destroying property), insults and humiliation. Finally, controlling behaviours (social abuse) include restricting access to food, shelter, financial resources, friends or family, employment and education. Other controlling behaviours include the restriction of liberty and independence and the monitoring of the victim’s movements. Thus we define IPV as an aggressive behaviour or a threatened aggressive behaviour, to a current or former intimate partner, that has the goal of inflicting severe physical, sexual, psychological or social harm. Because this chapter will focus on IPV exemplars of DV, we will use the term domestic violence to describe IPV that occurs repeatedly across time.

**Basic principles that underlie the GAM**

Because the GAM is a bio-social cognitive theory of aggression that incorporates an information-processing substrate, it is important here to note the basic principles of neural connectivity that underlie this approach, as well as earlier theories of aggression that have been incorporated into the GAM.
The key assumption is that human beings learn through creating a set of associations in their neural network, as suggested by Collins and Loftus (1975). When a new perceptual experience occurs, or a new concept is experienced, it is assumed that a ‘node’ of specific neurons is set aside in the brain to recognise that thing/concept and to ‘fire’ when it is experienced again. When two things are experienced together, the two nodes are not only activated at the same time; they start to become neurally connected. The more often these two things are activated together, the stronger this neural connection becomes, with some nodes becoming strongly associated (for example, the concepts of ‘blood’ and ‘red’). Further, if two nodes develop a significant connection, activating one will begin to activate the other through spreading activation (Collins & Loftus, 1975). In this way, activating one concept (such as ‘blood’) will also start the process of activating neurally linked concepts (such as ‘red’)—thus, the adage that "neurons that fire together, wire together."

Crucially, from the toddler years on, patterns of connections develop from experience, patterns. These can involve multiple nodes arranged into a complex network of stable links called knowledge structures, some of which become discrete entities known as schemas. Schemas contain strongly linked thoughts, feelings, concepts and memories related to specific aspects of experience that have in the past occurred regularly and played out similarly. Schemas typically include knowledge about a particular facet of experience, related attitudes, beliefs, expectations and memories, links to typical feelings, and scripts for how to behave. Because a schema is a discrete entity, activating one component will activate or partially activate (prime) the whole schema, and the schema will then impact the way the holder perceives the world, as well as their expectations and behaviour. For example, a child may have a schema about their bedtime routine that includes the typical script of events (after...
dinner mum asks me to brush my teeth and go to the toilet, and then dad takes me into my room, tucks me into bed and takes a book off the shelf. He starts to read and I start to feel sleepy). It will also include other information about the routine (I will be in my pyjamas; it may or may not be dark etc.), as well as links to specific memories (dad read ‘The tiger who came to tea’ two nights ago), past feelings (secure, warm, sleepy, happy), beliefs and expectations (this will happen every night that dad is home) and action tendencies (I go straight to the bathroom when asked and brush my teeth etc.). When activated by a trigger such as mum saying “bed time”, the script will remind the child of what normally happens next and what can be expected, and will guide their behaviour.

Once knowledge structures such as scripts, schemas and cognitive biases become well established, they can be both helpful and unhelpful. Holders may be spared the need to learn information over and over (such as where items are usually located at the local supermarket), and can follow a script for behaviour automatically or with minimal conscious thought, thus freeing up memory and cognitive capacity for other tasks. However, if the patterns of behaviour linked with these knowledge structures are maladaptive, they can often continue unchallenged because the impact of activated knowledge structures on behaviour is often automatic and non-conscious.

Conceptualising human responding in terms of the activity of a person’s associative neural network allows researchers to theorise about how people acquire a repertoire of aggressive or violent behaviours through actual or vicarious learnt experience. They may associate aggressive responses to particular cues in the environment through associative learning, learn that aggressive behaviour is rewarded more than it is punished through instrumental conditioning (Eron, Walder & Lefkowitz, 1971), or simply copy the behaviour of others
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(Bandura, 1973, 1983; Bandura, Ross & Ross, 1961, 1963). Environmental cues may trigger aggression-related concepts, schemas or scripts for behaviour, and, if frequently enacted, aggressive responses included within knowledge structures may operate automatically and without the holder being aware of what has driven that response.

Theories of aggression that underlie the GAM

Early theories of aggression reflected current knowledge about behaviour acquisition. The frustration-aggression hypothesis of Dollard, Doob, Miller, Mowrer & Sears (1939) was the first systematic theory of aggressive behaviour and, with roots in psychoanalysis, emphasised the frustration felt when people are thwarted from attaining goals. It was theorised initially that all aggression stems from the anger produced when one is frustrated, but because it became quickly clear that not all aggression can be traced back to anger or to frustration, the formulation was later revised to allow for alternate responses to frustration.

In the 1950s and 1960s, when much research was taking place on associative and instrumental conditioning, it was demonstrated that these learning principles applied to the acquisition of aggressive behaviours as well (Eron et al., 1971). Further, in the 1960s it became clear that people could also learn aggressive behaviour through simply observing the behaviour of aggressive models. Such behaviours are particularly likely to be imitated if the models are heroic, admired, high status, attractive, similar to the observer, and are rewarded for their aggressive behaviour (see Bandura et al 1961; 1963; Bandura, 1973, 1983).

Another approach emerged in the late 70s. It had become known that the cognitive label people give to emotions and states of physiological arousal are crucial in determining their
behaviour (e.g., Schacter & Singer, 1962). Building on these findings, Zillmann (1979) proposed an Excitation Transfer theory of aggression. Zillmann noted that physiological arousal is slow to dissipate and theorised that when two arousing events are separated by a short period of time, arousal from the first event will be added to arousal from the second. Crucially, there may be a misattribution whereby the cause of the second event is assumed to be responsible for all of the arousal. So, for example, if a person has sex (or takes a bike ride, or runs up a flight of stairs) and shortly afterward has a conflict with their partner, the person may become disproportionately angry, assuming that their strong feelings and high levels of physiological arousal are all due to the argument. Such anger, along with the misattribution for what caused the anger, may last long after the physiological arousal itself has dissipated.

In the 1980s, with the cognitive revolution and burgeoning knowledge about neural networks and cognitive processes, some earlier models were revised. Bandura’s theory of social learning was extended to become Social Cognitive theory (Bandura, 1986) and Berkowitz (1989, 1990; 1993) reformulated the frustration-aggression hypothesis of Dollard et al (1939) into the Cognitive Neo-association Theory (CNT).

In Berkowitz’s formulation, aversive events such as frustrations, provocations or unpleasant physical environments (e.g., hot temperatures, foul odours) produce negative affect, which is neurally linked to various thoughts, feelings and behavioral tendencies that are themselves linked to fight and flight tendencies. One response type (fight or flight) will become more activated than the other, depending on the characteristics of the person and the specifics of the situation. Dominant ‘fight’ responses are linked with anger and are thus more likely to elicit aggression. Although aggression in this formulation can always be traced back to an increase in negative feelings/affect, the CNT allows for higher order processes such as
making attributions about another’s motives or thinking through the consequences of an aggressive response. Such processes may cause a person to moderate an initial aggressive impulse.

Also in the 1980s, some scholars started to conceptualize the acquisition of social behavior in terms of computer-like processes — inputs, outputs and information processing. From this endeavour came two influential approaches to understanding aggression – Script Theory from Huesmann (1988; 1998) and the Social Information Processing model of Crick and Dodge (1994, 1996).

Huesmann’s Script Theory of aggression (based in part on Abelson's work on scripts, see Schank & Abelson, 1977) emphasizes the learning of behavioural scripts (conceptualised as similar to the sorts of scripts an actor might use in playing a role) which might be acquired through direct experience or through vicariously seeing such scripts enacted either in the mass media or in real life. Once encoded in semantic memory, scripts define particular situations and provide a guide for how to behave in them. Script theory assumes a progression of steps that would typically occur. When faced with a particular situation the person would retrieve a script relevant to that situation from memory, assess the appropriateness or likely outcome of enacting the script (if the script is unacceptable the person would retrieve further scripts until an acceptable script is retrieved), and once a script is judged appropriate, behave in accordance with that script. When people respond to conflict by habitually retrieving and acting on aggressive scripts for behaviour, these scripts may become chronically accessible (more easily brought to mind). Aggressive responses to certain triggers may then become more and more automatic, and generalize to a wider and wider range of situations.
Another tenet of script theory is that beliefs which normalise and approve the use of aggressive behaviour decrease resistance to the enactment of aggressive scripts and increase the likelihood that an aggressive script will be chosen, enacted, repeated, and, eventually, become chronically accessible. In a sense, beliefs about the appropriateness and the likely outcomes of scripts become decision rules that help determine whether a particular script will be enacted or rejected. And of course, with practice these "decisions" tend to become automatized, requiring little or no thought, and little or no awareness by the person that a decision has been made.

Social Information Processing (SIP) theory emphasizes the way people perceive the behavior of others and make attributions about their motives. Like Script Theory it posits a progression of steps in processing and interpreting cues from the environment. A key construct in SIP theory is the hostile attributional bias – a tendency to interpret ambiguous events (such as being bumped in a corridor) as being motivated by hostile intent.

CNT, SIP and Script Theory have a number of common elements.

- They are based on neural processing of information;
- They assume that aggressive patterns of behaviour can be acquired through associative conditioning, instrumental conditioning and social learning;
- They emphasise the role of triggers and cues in the environment that then activate learned patterns of aggressive behaviour that are stored in a person’s neural network, often in larger knowledge structures such as schemas and scripts;
- They acknowledge that each person holds a different set of such knowledge structures;
- Evaluations take place during appraisal processes. For example, if people have the time and mental resources they will typically make decisions as to whether aggressive behaviour is appropriate in the situation (i.e., normative) and will achieve the desired outcome. They will likely also evaluate whether they have the self-efficacy to aggress successfully (e.g., Boxer & Dubow, 2001).

- Many of these processes can become so over-learned that they become automatic, and therefore somewhat difficult to disrupt or stop.

The General Aggression Model

The General Aggression Model (GAM; Anderson & Bushman, 2002a) incorporates key elements from these recent social cognitive and information processing approaches, along with elements of learning theories and arousal-based theories. It assumes the neural substrate already noted, and incorporates findings from a wide range of psychology disciplines (Warburton & Anderson, in press).

The core of the model explains the psychological processes involved in a single instance of aggressive behaviour. Such an instance involves a person, with all of their characteristics (including biological attributes, genetic predispositions, personality, attitudes, beliefs and learned behavioral scripts), responding to an environmental trigger such as a provocation, an aversive event or an aggression-related cue (see Figure 1). The person factors, together, impact the degree to which the person is likely to respond to particular triggers with aggression.

Insert Figure 1 about here
The environmental trigger impacts the person's current internal state in three key areas: their activated cognitions (e.g., knowledge structures), their current affective (emotional) state, and their level of physiological arousal. All three areas interact, as well as exerting a direct effect on the individual. If the activated cognitions include beliefs and attitudes approving aggression, hostile biases, scripts that involve aggressive behaviour, or other concepts/ideas/tendencies that facilitate an aggressive response, then the likelihood of aggressive response is increased. The same is true when hostile emotions such as anger are active. Increases in physiological arousal do not alone increase the likelihood of aggression; they increase the likelihood that the person will act on an impulse or enact a dominant action tendency. However, if a person is feeling angry and inclined to aggress, and they are also physiologically aroused, this arousal will increase the likelihood that the person will act on that inclination rather than think through the consequences of their actions and thus moderate their behaviour. Of course, if nonaggressive cognitions and emotions are activated, then the likelihood of aggressive action declines.

During the appraisal stage, an immediate response to the situational trigger is formulated, based on the influence of the activated cognitions and feelings. This immediate response may be to aggress. However other factors may come into play. If the person is highly stressed or aroused, needs to act quickly, doesn’t have the cognitive resources to think through their action or isn’t much concerned about the impact of that response, they may respond aggressively, and, in such a case, impulsively. However, if the person has the time and psychological resources to do so, and the immediate scripted response is deemed likely to have negative consequences, then the person would engage in reappraisal processes whereby alternate courses of action are quickly considered and discarded until a suitable response is
chosen and enacted. This may or may not be aggressive. Often (but not always), higher levels of appraisal reduce the likelihood that an aggressive impulse will be acted on. This is one point in the cycle where impulse control and cognitive capacity play a large role.

In any case, it is important to note that each such instance of social behavior is also a learning experience. That is, whatever behavior is enacted feeds back into the current situation, influences what the other person does, and has consequences for everyone involved. What is learnt from the encounter is accommodated and assimilated into and with existing knowledge structures, thus impacting attitudes and beliefs, and becoming part of the person’s psychological makeup. These changes impact subsequent events because they impact the ‘person’ factors that increase or decrease the likelihood of responding to certain triggers with aggression. In this way, the GAM can explain the long-term acquisition of aggressive patterns of behaviour. In short, this is how experience produces fairly stable long-term changes in personality.

Although the GAM looks deceptively simple as a diagram, the model includes detailed assumptions that take into account a wide range of within-person factors, possible triggers for aggression, known internal psychological processes, and the means by which behaviour is reinforced and learned. These latter processes include many that have been described earlier in previous aggression models – the acquisition of schemas, scripts and learned behaviours through changes to a person’s neural network.

In the following section we will examine factors that fall within each part of the GAM and note known or potential links with domestic violence.
Domestic violence through the lens of the GAM

**Person factors**

There are hundreds of possible within-person factors that may contribute to domestic violence. Although a small number of key variables are noted here, clinicians who use the GAM to inform their understanding of DV should be vigilant for, and flexible in discovering and using, factors not listed here.

**Biology and genetics**

Both biological and genetic characteristics can impact aggression and thus domestic violence. For example, increases in hormones such as testosterone can increase the likelihood of both aggression (Archer, 1994) and domestic violence (e.g., McKenry, Julian & Gavazzi, 1995), especially in DV perpetrators who also have alcohol problems (George et al., 2001). In terms of managing domestic violence, it is important to note that testosterone levels can increase and decrease in response to environmental factors (Archer, 1994).

In relation to genetics, it is currently thought that inherited characteristics probably account for perhaps a quarter to a third of an aggressive predisposition (Tuvblad, Raine, Zheng, & Baker, 2009). A number of genes have been identified, but the effect on aggressive or violent behaviour is mostly indirect, with holders of genetic markers typically having higher levels of aggression-related temperament factors such as impulsivity. Two genetic markers have attracted the most attention in the field of aggression research - a polymorphism in the promoter of the monoamine oxidase A gene (MAOA) and a variation in the 5-HT serotonin
transporter gene. Importantly, for children in families where there is domestic violence, the effects of the MAOA gene polymorphism are epigenetic (i.e., caused by an interaction between the genetic predisposition and environmental factors that impact the action of the gene). Those who have this genetic polymorphism are most likely to become aggressive and anti-social if they also experience childhood maltreatment (Kim-Cohen et al., 2006). Thus, this genetic factor has the potential to underlie some of the generational family violence noted by Widom, Szaja and Dutton (2014), whereby child maltreatment predicts the most serious forms of later domestic violence.

It is important to keep in mind that even though these genetic risk factors influence brain function, they eventually operate through the psychological processes outlined in GAM. This means that DV or other inappropriate forms of violence are not inevitable, but can be moderated by interventions that operate more directly on the psychological factors known to be involved in promoting and inhibiting violent behavior. For example, certain biological factors may influence a person's impulse control system, but one can improve impulse control through practice, and other aspects of the aggression/violence system can also be modified (e.g., beliefs about the appropriateness of DV, accessibility of non-violent solutions to conflict).

*Gender*

Gender issues around DV are currently contentious and we do not wish in this chapter to become part of this debate. However, there seems to be evidence that DV which results in severe physical or emotional harm can be perpetrated by both males and females (e.g., Dobash & Dobash, 2004; Zanoni, Warburton, Bussey & McMaugh, 2014), but that males are
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responsible for a greater proportion of serious physical injuries and higher level IPV such as behaviour that could be categorised as ‘intimate terrorism’ (Johnson, 1995, 2006, 2011). For example, data from the US (Catalano, 2013), UK (Smith et al., 2012) and Australia (Australian Bureau of Statistics. 2013) all suggest that women report considerably more violent behaviour and injuries perpetrated by their partner than men do, and that the majority of victims of sexual violence are women. This is also reflected in homicide statistics. The World Health Organisation (2013) notes that globally, IPV homicides constituted 38% of all female homicides, compared to just 6% of all male homicides. 2002-2011 US data analysed by Catalano (2013) revealed that 39.3% of female homicides were related to IPV compared to just 2.8% of male homicides, and that in the same period, non-fatal violent victimisations stood at 805,700 for women versus 173,960 for men.

This has two important implications for clinical practice. First, practitioners should be aware that severe domestic violence is more often perpetrated by men. Second, this information should not cause practitioners to overlook the possibility of female to male domestic violence, especially given the reluctance of males to admit to being badly hurt by females in most cultures, and the severe physical and psychological harm that can be caused to male victims (Zanoni et al., 2014).

**Personality traits**

Personality characteristics essentially refer to those psychological parts of a person that remain somewhat stable across situations (such as a tendency towards shyness) and across time. Although much personality research currently conceptualises personality as a set of stable traits (e.g., Costa & McCrae, 1994), it is relevant for DV practitioners that the GAM
assumes a much wider conceptualisation of personality that emphasises the contribution of
scripts, schemas, beliefs and attitudes to a person’s stable personality (Anderson & Carnagey,
2004; see also Mischel 1999, Mischel & Shoda 1995). Thus, a person whose personality
incorporates a lot of aggressive schemas and scripts, or a belief system that normalises
aggressive responding to conflict, will have a higher predisposition to aggress. This does not
mean the GAM makes no allowance for the impact of traits – the GAM also assumes that
high levels of personality traits linked with aggression (most notably high trait anger, high
trait aggression, low agreeableness and high neuroticism) would also predispose a person
towards aggression and DV (e.g., Barlett & Anderson, 2012; Caprara, Barbaranelli, Pastorelli
& Perugini, 1994; Graziano & Eisenberg, 1997). Further, longitudinal studies have shown
that repeated environmental experiences (e.g., high exposure to media violence) can create
systematic changes in trait aggression (e.g., Anderson et al., 2010; Gentile et al., 2014;
Moller & Krahe, 2009).

Also germane to the GAM are personality styles linked with aggressive behaviour. These
include the narcissistic personality (Warburton, Edwards, Hossieny, Pieper & Yip, 2008), the
shame-prone personality (Tangney, Wagner, Hill-Barlow, Marschall & Gramzow, 1996), the
psychopathic (anti-social) personality (Reidy et al., 2007), and the Machiavellian personality
(Kerig & Stellwager, 2010).

Another relevant within-person variable is the presence of a personality disorder. It has been
shown that IPV perpetrators and repeat violent offenders are more likely to have a personality
disorder, most notably a Borderline Personality Disorder or Antisocial Personality Disorder
(Gilbert & Daffern, 2011; Holtzworth-Munroe & Stuart, 1994; Ross & Babcock, 2009;
South, Turkheimer & Oltmanns, 2008). However other personality disorders have also been
linked with aggression and with domestic violence, including the Narcissistic Personality Disorder and Dependent/Compulsive Personality Disorders (Hamberger & Hastings, 1986).

In terms of the GAM and domestic violence, the most relevant components of personality, whether they are parts of traits, personality styles or clinical disorders, are those that influence the way a person thinks and feels. People with personalities that include more hostile cognitions and/or a tendency toward negative affect are more likely to hurt an intimate partner.

**Beliefs, attitudes, and attributions**

Beliefs, attitudes and values underlie many of the personality components noted earlier. Most relevant to the GAM and to understanding domestic violence are those beliefs and attitudes that approve aggression and violence. Normative beliefs that approve of aggression (Huesmann, 1998) are particularly relevant. Such beliefs tend to be stronger and better elaborated in violent populations (Gilbert & Deffenb, 2010), and the strength of such beliefs predicts levels of violent behaviour in criminals (Polaschek, Calvert & Gannon, 2009; Polaschek, Collie & Walkey, 2004).

More specific to domestic violence, Sugarman and Frankel’s (1996) meta-analytic review of studies of IPV perpetrators’ attitudes revealed that this group is far more predisposed to have positive attitudes towards using physical aggression in relationships. In addition, a prospective study by Fincham, Cui, Braithwaite and Pasley (2008) found that people with attitudes that are more positive towards IPV were more likely to physically assault or regularly abuse their current intimate partner in the following 14 weeks. Interestingly, tests of
implicit attitudes have shown that relationally violent men may not be consciously aware of holding such attitudes, but still unconsciously pair the concepts of women and violence (Eckhardt, Samper, Suhr & Holtzworth-Munroe, 2012). Also relevant is the robust finding that IPV perpetrators tend to attribute the cause of violent incidents to their partners rather than themselves (Murphy & Eckhardt, 2005).

**Schemas and scripts**

Aggression-related knowledge structures are central to both the GAM and to understanding violence (including domestic violence) through the lens of the GAM (Gilbert & Daffern, 2010; Gilbert, Daffern, Talevski & Ogloff, 2013). In this approach, domestically violent men and women would be expected to have a neural network that includes many concepts around aggressive behaviour and many knowledge structures with aggression-related and/or violent content. When considering instances of domestic violence (such as the case of AB noted earlier), evidence that aggressive/violent schemas and scripts are causing patterns of behaviour that are repeated would be seen as highly important and instructive. Also important are the sorts of cues, triggers and situations that would typically activate those schemas and scripts. In the first author’s clinical experience with victims of domestic violence, such patterns are almost always apparent once specific examples of IPV are described in detail by victims.

Another type of schema also seems relevant here. Young and colleagues (e.g., Young 1999; Young, Klosko & Weishaar, 2003) describe 18 *early maladaptive schemas* (EMS) each of which comprises a constellation of unhelpful beliefs, attitudes and feelings about key aspects of life. For example, those with *entitlement* schemas tend to see themselves as above the law,
entitled to treat others as they see fit, and not accountable for their actions. Those with *subjugation* schemas believe they must surrender control of their life to others in order to avoid that person’s anger, retaliation or abandonment. Not only are those with maladaptive schemas more likely to be more aggressive (Warburton & McIlwain, 2005), exposure to ‘toxic’ and traumatising experiences (such as violence and abuse in the home) has been linked to the development of a range of maladaptive schemas (Young et al., 2003). Once developed, these EMSs may underlie a range of personality disorders (Giesen-Bloo et al., 2006; Young & Flanagan, 1998; Young & Lindemann, 1992; 2002) that are, in turn, linked with domestic violence (e.g., Holtzworth-Munroe & Stuart, 1994). Thus, an intergenerational cycle of abuse, psychological damage and later interpersonal violence seems likely in some families. *Schema therapy*, which challenges the cognitive substrate of EMSs (e.g., Young et al., 2003), has been incorporated into some treatment programs for abusive partners (e.g., Murphy & Eckhardt, 2005).

**Impulsivity and Self-regulation**

There are clear links between impulsivity and aggression, especially when the impulsive person is provoked (e.g., Bettencourt, Talley, Benjamin & Valentine, 2006). This link is probably mediated by a number of other factors such as inadequate self-restraint against aggressive impulses (Berkowitz, 2008), failure to properly think through the consequences of actions (Joireman, Anderson & Strathman, 2003) and emotional arousal linked to anger and negative thoughts (e.g., Gilbert & Daffern, 2010).

In addition, both impulsive and non-impulsive people can have failures of self-regulation that lead to aggression and violence (De Wall et al, 2011). This may especially occur when the
person is physically tired, mentally exhausted or under time pressure to respond to a situation. Finkel and colleagues (2009) investigated associations between IPV and self-regulation failure, and concluded (1) that self-regulatory failure is an important predictor of IPV and (2) that conditions which reduce the capacity for self-control (such as mental exhaustion) increase the risk of IPV. Alcohol also interferes with self-control, which is one reason (but not the only one) why it is so highly associated with DV.

*Needs*

It is clear that much aggression and violence stems from a perceived deprivation of physical, psychological, emotional, and social needs, and represents an attempt to satisfy these needs (e.g., De Wall & Anderson, 2011). One key need is to have control over one’s world and one’s relationships. Aggression may be one way of reasserting control over one’s environment (Warburton & Williams, 2005; Warburton, Williams & Cairns, 2006) and over one’s intimate partner (e.g., Stets, 1988). Indeed, it is possible that feeling powerless may be the catalyst for violence that serves to ‘restores control’ in both intimate relationships (Petrik, Petrik Olson & Subotnik, 1994; Rosenbaum & Leisring, 2003) and parent-child relationships (Bugental & Johnson, 2000; Bugental & Schwartz, 2009).

There is also evidence that other key needs – to feel autonomous and have positive self-esteem – may be implicated in domestic violence. One study has shown that partner-assaultive men had lower self-esteem and greater spouse dependency than partner non-assaultive men (Murphy, Meyer, O’Leary, 1994) and another has replicated the finding of greater spouse dependency (Kane, Staiger & Riccardielli, 2000). Thus, it is possible that
some IPV perpetrators use verbal, psychological and physical abuse to restore depleted self-esteem and feelings of autonomy.

**Situation factors**

*Provocation*

Perhaps the single biggest trigger for aggression is being provoked by another (Bettencourt et al., 2006). This is important in domestic violence, where many perpetrators believe that the causes of most domestically violent interactions involve the provoking actions of their partner (Murphy & Eckhardt, 2005). It is important to remember that such provocations do not have to be proximal and direct to elicit aggression and violence (Warburton & Anderson, in press). For example, they may involve feeling ostracised/excluded/rejected by one’s partner, or being the subject of hurtful rumours and gossip. Furthermore, provocation may not even be real, but simply imagined by the perpetrator, or may reflect hostile attribution biases.

*Aggressive cues and triggers*

This is a central factor in the GAM. At the beginning of any episode of aggression (and thus domestic violence), there needs to be some sort of cue or trigger in the environment that then causes various thoughts and feelings to be activated in the perpetrator. Crucially, this trigger does not have to be consciously thought of. Some aspects of life are strongly linked to concepts of violence for almost all people. These cues, such as seeing a gun or a depiction of a gun, or reading weapon-related words, can prime aggressive thoughts and increase the
likelihood of aggressive behaviour, even when the exposure is so brief that the person cannot recollect it (Anderson, Anderson & Deuser, 1996; Anderson, Benjamin & Bartholow, 1998).

One possible cue that is commonly found in most homes is media with violent content. There is now considerable consensus around the notion that watching violent television or movies (Anderson et al., 2003; Anderson & Bushman, 2002b; Krahe et al., 2012; Warburton, 2012a), listening to violent music (Anderson, Carnagey & Eubanks, 2003; Brummert-Lennings & Warburton, 2011; Warburton, Gilmour & Laczkowski, 2008; Warburton, Roberts & Christenson, 2014; Warburton, 2012b; 2014a), or playing violent video games (Anderson et al., 2004; 2010; Anderson, Gentile & Buckley, 2007; Anderson & Warburton, 2012; Warburton, 2014b), has an immediate impact on aggressive cognitions and feelings and increases the likelihood of aggressive behaviour.

Importantly, those with more aggression-related concepts and knowledge structures in their neural network, and those predisposed to aggressive affects such as anger, are likely to also have more cues and triggers for aggressive thoughts and feelings (Anderson & Bushman, 2002a). Thus, there is a greater range of situations that may lead to that person becoming aggressive or violent.

Interestingly, a stimulus that cues aggression in most people may not do so in others. For instance, although seeing a hunting weapon cues aggressive thoughts and increases aggressive behavior in most people, hunting weapons cue a very different set of thoughts among people who grew up as hunters. For them, hunting guns (e.g., rifles with wood stocks) remind them of family hunting trips with their father and brothers, thereby reducing or eliminating the standard weapons effect. Interestingly, these same hunters show the standard
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weapons effects on aggressive thoughts and behavior when the weapon is clearly an assault type weapon or a handgun (Bartholow, Anderson, Carnagey, & Benjamin, 2005).

Aversive environment

A wide variety of aversive experiences or stimuli in the environment are known to increase the likelihood of aggression and violence. The most notable are high temperatures (Anderson & Anderson, 1998; Anderson et al., 2005), physical pain (Berkowitz, Cochran & Embree, 1981), loud or aversive noises (Glass & Singer, 1972), foul odours (Jones & Bogat, 1972) and exposure to another’s tobacco smoke (Zillman, Baron & Tamborini, 1981). The impact of such stressors on aggressive behaviour is much greater when the individual has no control over them (Donnerstein & Wilson, 1976; Warburton et al., 2006).

In terms of domestic violence, it is helpful to know that these environmental factors can exacerbate aggressive responding. If the potential perpetrator is in pain, if the day is very hot, if there is a lot of tobacco smoke, if loud music is playing, or if the environment is unpleasant in some other way, then this may influence the likelihood of violence occurring. Clearly, an effective strategy for reducing domestic violence should take into account minimising the impact of aversive experiences or environments.

Alcohol and other substances

There are clear links between aggression and substances that cause either disinhibition (such as alcohol) and/or an increase in physiological arousal (e.g., stimulants, amphetamines and methamphetamines)(Warburton & Anderson, in press). This is most true for those with an
existing predisposition to aggress, because it is this aggressive tendency that is the most likely automatic response to a perceived provocation, and substances that promote impulsivity or impede self-control (i.e., that reduce the likelihood to reappraise) thereby increase the likelihood of impulsive DV (e.g., Giancola, 2000).

Being intoxicated or having alcohol abuse problems are among the most robust predictors of IPV (Murphy & Eckhardt, 2005). Studies consistently find a significant linear relationship between alcohol consumption and intimate partner violence (Kantor & Straus, 1997) and between alcohol-related problems and IPV (Cunradi, Caetano, Clark & Schafer, 1999).

Indeed, one study by Murphy and O’Farrell (1996) found that over half of the female partners of men receiving treatment for alcohol problems had experienced IPV from that person in the prior 12 months. However it should be noted that use of alcohol increases the risk of IPV for both females and males (see Foran & O’Leary, 2008, for a review).

**Current internal state: Hostile thoughts and biases**

The role of existing hostile cognitions (including knowledge structures, normative beliefs, and attributional biases) has been noted in some detail above. Here we examine factors relevant to the person’s current internal state. Some key assumptions derived from the GAM are that:

1. The more hostile the content within a person’s neural network, the greater the likelihood of aggression in the moment;
2. The greater the activation of aggression-related cognitions (in terms of both the number and the level of activation), the greater the risk of aggression in the moment;
3. Concurrent activation of aggressive cognitions and aggressive feelings will increase the risk of aggression in the moment;

4. Greater arousal will increase the likelihood of a person acting on an aggressive script in the moment.

In terms of habitually violent people, it has been established that this group have more developed and more extensive cognitive networks and knowledge structures linked to aggression as hypothesised by the GAM (e.g., Gilbert & Daffern, 2010; Gilbert et al., 2013). Although this aspect of the GAM has not been tested specifically in a domestically violent population, this group has been represented within existing offender studies that have been tested, and it seems logical that the same principles would apply to this group. Findings related to the attitudes, biases and attributions of IPV perpetrators are certainly congruent with this notion, as are studies finding links between hostile cognitions about one’s partner and increased levels of IPV (e.g., Fincham et al., 1997). This higher level of existing aggressive cognitions increases the likelihood of aggressive schemas and scripts being activated in the moment. Studies of aggressive cognitions activated in the moment (i.e., of current internal state) show that, in line with the GAM, concurrent activation of multiple aggressive cognitions (i.e., aggressive scripts as well as normative beliefs approving aggression) increases violent inclinations (Gilbert et al., 2013).

Current internal state: Hostile feelings and affect

Hostile feelings can have a direct effect on aggression, but can also play a part in activating aggression-related concepts and knowledge structures (Gilbert & Daffern, 2010). For example, Gilbert and colleagues (2013) found that the inclination to be violent increases
when both aggressive cognitions and feelings of anger are activated together. It should be noted that although the emotion most linked with aggression is anger (Howells, 1998; Novaco, 1997), those with a general tendency toward negative affective states also are more likely to be aggressive (Bettencourt et al., 2006), and other negative emotions such as jealousy and shame are also linked with aggression (e.g., Mescher & Rudman, 2014; Tangney, 1996).

In terms of domestic violence, the effect of anger has been well researched. Although this research often has issues with both measuring and defining anger (e.g., Murphy & Eckhardt, 2005), a review of findings by Holtzworth Munroe and Clements (2007) suggests that perpetrators of IPV are more likely to have high levels of trait anger, and that high levels of state anger increase the likelihood of IPV occurring. They note, however, that perpetrators of IPV are a heterogenous group. Some are much more likely than others to have high levels of trait anger (e.g., those with posttraumatic stress issues and those with a ‘fearful’ attachment style), and some will be more prone to explosive anger in the moment (for example, those with borderline traits).

**Current internal state: High levels of arousal**

Although it has been shown that high levels of physiological and emotional arousal increase the likelihood of aggression and violence, this is one of the least well researched facets of both aggressive behaviour and the GAM (Anderson & Bushman, 2002a). Nevertheless a number of facts are known. The original source of the arousal is largely irrelevant to whether it impacts aggression or not. In addition, the impact on aggression may be through a range of processes. Arousal increases the likelihood that a person will act on an aggressive impulse
and reduces the likelihood they will think through the consequences of an aggressive action. Also, high levels of arousal can feel unpleasant, thus becoming an aversive experience that can elicit aggression. Sometimes arousal is part of a fight or flight response that impels people straight into an aggressive action. Arousal may also be cognitively labelled as being due to anger, and excitation transfer may compound this effect, leading to a disproportionately aggressive response. At the other end of the arousal spectrum, low levels of arousal may facilitate aggression if people lack the energy and motivation to inhibit aggressive impulses or if chronic low arousal is experienced as a negative state. It seems likely that arousal would impact instances of IPV in similar ways to those noted above, however, to date there is very little research on arousal and IPV (De Wall et al., 2011).

**Opportunity for reappraisal**

Overall, it seems that the risk of aggression (and for domestic violence) increases as risk factors accumulate: those within the person’s psychological makeup, those related to currently activated cognitions and emotions, and those related to levels of arousal.

In the final phase of the GAM, there is further opportunity for the risk of aggression and domestic violence to be reduced or increased. At this point in the model, the person has already formulated an immediate (automatic) response to some perceived threat or provocation. In a domestically violent person with an accumulation of personal risk factors, the likely immediate response is to hurt their partner. However, at this point, the person has the chance to evaluate and think through the consequences of such an action. For this to occur, the conditions for an automatic response must be absent, and the requirements for reappraisal to occur must be present. The person should have sufficient mental resources to
reappraise (including not being under the influence of disinhibiting substances), the immediate response should be unsatisfactory in some way (for example, have perceived negative consequences), and there should be no time urgency. In most cases, reappraisal would be expected to reduce the risk of subsequent domestic violence.

In terms of domestic violence and reappraisal, the findings of Finkel and colleagues (2009) are instructive. Their studies on self-regulatory strength and IPV suggested that people who do not have sufficient mental resources to engage in reappraisal processing (i.e., are mentally exhausted) are more likely to be aggressive to intimate partners.

Of course, in some cases reappraisal can increase both the likelihood and the severity of an aggressive response. For example, reappraisal may lead the person to decide that the provocation was even more severe than initially thought, and that it warrants even more severe punishment or retaliation. The research literature on how rumination increases aggression is particularly relevant here (e.g., Denson, Pederson & Friese, 2011; Denson, White & Warburton, 2009).

The GAM and therapeutic interventions for domestic violence

Principles from the GAM that could inform treatment approaches

A number of the principles that underlie the GAM, or that can be derived from the model, have relevance to the treatment and management of domestic violence. First, although many domestic violence programs based on social learning principles are group-based interventions, therapists who use GAM principles as a basis for treatment would also need to
take an individualised approach, as the GAM emphasises so strongly the unique factors in each person that predispose a person to domestic violence in particular situations. Such a dual approach would allow the therapist to take advantage of the economy of group-based approaches to help change risk factors that are common among most DV perpetrators, while also capitalizing on the power of individualised approaches to discover and change risk factors that are fairly unique to the individual. For example, two such risk factors that seem common among many DV perpetrators are poor reappraisal skills and normative beliefs about physical aggression. A recent experimental study has shown that a classroom based reappraisal intervention can reduce aggression by college students (Barlett & Anderson, 2011). Nonetheless, because the specific set of knowledge structures and cognitive/affective abilities and tendencies that are involved in DV vary across individuals, careful idiographic assessment of which ones are most relevant for a particular client is needed to allow individualised treatment plans to be created.

Second, in order to understand and treat DV, the therapist needs to obtain quite a detailed understanding of both the DV client and the situation factors that contribute to their DV episodes. There will be risk factors, protective factors and a range of triggers that are important for the therapist to understand.

Third, patterns of behaviour can be changed by altering the content of, and triggers for, cognitions and knowledge structures learned over time. It is harder to change the sorts of emotions that might be activated in a particular situation (emotions are deeper in the brain and patterns of activation are more change-resistant; e.g., see Panksepp, 2008), however people can also be taught more adaptive ways to manage their emotions (McMain, Korman & Dimeff, 2001). Overall, because neural plasticity occurs throughout the lifespan (Gutchess,
2015), a person’s neural network is able to be changed in ways that facilitate significant decreases in aggressive and violent behaviour (e.g., through modifying aggressive cognitions - see Polaschek & Collie, 2004).

Finally, the same principles that underlie aggressive behaviour in the GAM also work to establish prosocial behaviour. For example, the General Learning Model (GLM), a modification of the GAM (Buckley & Anderson, 2006; Barlett & Anderson, 2013; Gentile et al., 2009) emphasises that exactly the same processes ensure that prosocial person factors interact with cues and triggers to activate prosocial cognitions and feelings, and ultimately pro-social behaviours.

Assessing the DV client and typical instances of DV

If therapists use the GAM to inform their practice with domestically violent clients, they would need to gather a range of information. The facets of the GAM, as well as the underlying assumptions, suggest enquiries in several fields:

Function of violence

First, it would be important to understand the function of the aggression on the 3 aggression domains.

1. What needs does each violent instance meet for the DV client? Does the violence serve the purpose of benefitting the perpetrator or hurting the other? How? Why?
2. Are DV instances typically affectively charged or cold and calculated? What are the emotions that are aroused? How does violence satisfy these emotions?

3. How thought-through is each instance? Is there a pattern? Do episodes play out automatically, almost like scripts? Are there opportunities to think-through responses? If violent responses are thought-through, what goals does the violence achieve?

*Within-person factors*

It would also be important to get some understanding of the relevant within-person factors. For example, what components of the DV client’s personality are relevant to their domestic violence?

- Are there aggressive traits? High trait anger, high trait aggression, high neuroticism, low agreeableness?
- Is there low empathy; low emotional intelligence?
- Does the DV client have an aggressive personality style (e.g., narcissistic or psychopathic), or is there evidence of a personality disorder?
- Is there a tendency to interpret others’ behaviours negatively? Is there a hostile attributional bias? Does the DV client tend to blame their partner for instances of domestic violence?
- Is there a tendency to interpret the outcomes of aggression positively? Are there normative beliefs approving aggression?
- Is there evidence of the presence of aggressive schemas and scripts? Is there evidence of the presence of early maladaptive schemas?
Also relevant within the DV client are their affective tendencies. Are they emotionally labile? Is there a tendency towards negative affectivity? Are they prone to depression, jealousy, and anger?

It is also helpful to know a little about the DV client’s executive functioning. Are they impulsive? Are they skilled at self-control and emotional regulation?

In terms of motivational influences, what needs are met by being violent? Is the DV client feeling powerless or dependent and exerting control through violence? Does the DV client have low self-esteem that is bolstered by hurting their partner? Are they fearful of abandonment and using violence to ensure their partner stays?

Finally, does the DV client have skill deficits in key areas such as communication, problem solving, stress management, assertiveness and emotion regulation?

A strengths-based approach: Assessing positive characteristics

Although it is important to understand the negative characteristics that contribute to domestic violence, the GAM and GLM emphasise that there is ‘another side to the coin’. DV clients also have strengths and abilities and memories of when they managed to avoid violence during domestic conflicts. They should be able to increase the impact of positive influences on positive behaviours and to change the contingency between cues and behaviours, so that triggers for aggression can start to elicit a more positive response (for example, to use the cue of acute feelings of dependence on a partner as a trigger to take independent action in a predetermined area rather than as a way to hurt the partner). Thus, the GAM and GLM
support a *strengths-based approach* whereby the therapist is aware of negative personal characteristics, but works to build on the DV client’s strengths, to assist them to develop positive skills in communication, active listening and managing conflict, to foster positive attitudes towards others, and to find positive ways to deal with traditional precursors of domestic violence.

For this reason, it is important to also discover the DV client’s positive *within-person characteristics*. What are their positive traits? What are they good at? What cognitive approaches are helpful and/or can be built on? Do they have empathy and can it be strengthened? Are they able to take another person’s perspective in role plays, and does a change of perspective elicit helpful changes to thinking? Can self-regulation be strengthened? Are there types of aggression and violence that the DV client disapproves of? Are there positive role models in the DV client’s life? Are there people the DV client cares for greatly or would like to protect? Are there positive emotional tendencies, or have there been times in the DV client’s life when they felt calm and happy, and which they can draw on for inspiration? Are there ways in which key needs can be met in a positive way? Were there times when the DV client better controlled their aggressive impulses or better managed their substance issues, and can those memories become a base from which to build a more positive response repertoire?

A good understanding of the DV client’s strengths can help the therapist understand likely protective factors for domestic violence. In addition, working from a strengths-based approach is more likely to gain the DV client’s cooperation and reduce the sort of resistance and defensiveness the therapist might experience if the client feels judged or shamed. Finally, it provides a basis from which to change the impact of environmental factors, so that, within
the DV client’s neural network, they trigger positive rather than negative cognitions and feelings. However, to achieve this, the therapist first needs to know what the relevant environment factors are.

**Environmental factors**

The best way to ascertain violence-relevant factors in the DV client’s environment is to look at the circumstances that have led to domestic violence across a number of instances. What are the most common provocations? Are there cues for aggression in the environment? Are there weapons or depictions of weapons nearby? Are there other aggressive people present? Has the DV client been exposed to violent media or been playing a violent video game? Is there violent music playing in the background? Is the person aware of violence occurring in the streets or homes nearby? Remember that the DV client does not need to be aware of such cues for them to impact on their behaviour.

Also important is to identify any aversive experiences or environments that may exacerbate aggressive tendencies. Is the home often hot or noisy? Is the DV client often in physical pain? Is the family home in an area where there are foul odours or high levels of pollution? Is the DV client a non-smoker in a house where there is a lot of tobacco smoke? Are other people in the house intoxicated or using substances, with their behaviour impacting the DV client?

Finally, it is important to know if alcohol or other substances are involved in the behaviour of the DV client. Do they have alcohol or other substance abuse issues? Are they usually intoxicated during episodes of domestic violence? Is the victim?
Using GAM relevant information to establish intervention protocols

Once the therapist, through talking to the DV client and possibly administering relevant testing instruments, has a good understanding of their strengths and weaknesses, and of relevant environment factors, they will have a good understanding of risk factors and protective factors for domestic violence that can form the basis for reducing the risk of DV.

When considering interventions and treatments through the lens of the GAM/GLM however, it is crucial to make one point. These tools can help the therapist but are not sufficient basis for therapy alone. When applying the GAM/GLM to therapeutic interventions, it is important to also adhere to a range of therapeutic practices not linked to these models of aggressive and pro-social behaviour. For example, the therapist will get best results if they have unconditional positive regard for their client, develop an empathic and connected client-therapist relationship, strive for client-directed change and use key skills such as active listening (e.g., Murphy & Eckhardt, 2005).

Having said this, the GAM/GLM indicate a number of therapeutic approaches that should be helpful.

Reducing person risk factors and bolstering protective factors

The underlying principle here is that each person’s neural network is plastic, and can thus be changed. What is already present in a person’s network cannot be simply erased – humans cannot ‘unlearn’ things – but the nature of the connections within a neural network can be altered. For example, if two new things are activated together often, they will develop a
strong new neural connection. Old connections that become unused begin to fade and become less strong. Knowledge structures can incorporate new knowledge and triggers for one thing can become triggers for another, with the old connections fading if they are not used. In this way, positive schemas and scripts can be augmented, and negative ones restructured to include more helpful content.

With this in mind, practitioners can address risk and protective factors in the three GAM domains – cognitions, affects and arousal (Gilbert & Daffern, 2011). Most amenable to change, but often under-emphasised in treatment are aggressive cognitions (Gilbert & Daffern, 2010). Cognitive restructuring will not be unfamiliar to most therapists, and involves gently challenging the attitudes, beliefs, values and attributions that have already been noted as contributing to domestic violence. In this way, new information can be accommodated and assimilated into schemas and scripts, and biases can be subtly altered in more positive directions.

In terms of domestic violence, this restructuring may involve:

- De-normalising and devaluing aggressive and violent behaviour; this may include making the DV client aware of the full range of consequences both to their partner, to others (such as their children) and to themselves;
- Examining social norms around aggression and violence to provide a wider perspective;
- Re-valuing others and re-learning trust. Challenging hostile attributions about others and the world around. Emphasising the good in others and the positive benefits of mutually supportive relationships;
- Helping the DV client to take personal responsibility for those actions for which it is appropriate to do so, and gently challenging unhelpful attributions about their partner;
- Challenging the core beliefs underlying early maladaptive schemas

Also helpful will be assisting the client to develop better emotion regulation and self-regulation skills. More recent formulations of self-regulation processes (e.g., Vohs & Baumeister, 2011) have emphasised that people self-regulate better when they practice it, and when they are not too mentally fatigued. The same principles seem to apply to aggressive and violent behaviour (De Wall et al., 2011). Thus, DV clients may benefit from both working consistently at self-regulation, and understanding that failures of self-regulation occur when they are fatigued.

In terms of emotion regulation, many programs for DV clients include anger management programs. Such techniques are somewhat controversial (e.g., Murphy & Eckhardt, 2005) and some approaches work better than others. Space precludes a detailed analysis here, but clearly, people who can regulate their emotions better, and who can channel the energy from anger into positive pursuits, are less likely to be domestically violent.

One key issue that is perhaps not as often addressed is the issue of managing physiological arousal. According to GAM principles, techniques that reduce arousal will help reduce the likelihood of domestic violence. This may involve teaching the client relaxation, inner calmness and/or mindfulness techniques, helping them learn their own triggers for arousal, and helping them establish patterns for lessening arousal during stressful situations (such as leaving the situation and having a cup of tea). In addition, some environments are more arousing than others. Noise, heat, parties, busy places, homes with many occupants and
threatening situations would all be expected to increase arousal levels. Having an advance plan about how to relax in such situations may also be very helpful to DV clients.

Another important facet of the GAM is the acquisition and maintenance of learnt behaviours. Thus, skills training and the opportunity to practice new skills would be seen as crucial to any effective domestic violence intervention. Key new skills may include better couple communication, active listening, non-aggressive assertiveness, perspective-taking, relaxation and mindfulness. The more that therapy sessions offer the opportunity to practice these skills and to role play situations where the skills are used, and the more that clients can build the practice of such skills into their everyday lives, the greater the likelihood of positive change and a real reduction in domestic violence potential.

*Reducing risk factors in the environment*

Changes within the DV client are important to reducing domestic violence, but take time. Changes to their environment are also important, and, crucially for therapeutic interventions, some can be instituted fairly quickly. Easiest to approach is identifying aversive experiences and environmental factors that may increase the potential for violence and looking for ways they can be managed. For example, can chronic pain be alleviated better or could the sufferer enter a program to manage chronic pain? Can sources of noise be quietened? Is it possible to air condition a room in the house or find a way to reduce the temperature on hot days?

More challenging, but definitely possible is identifying environmental cues and triggers for violence and finding ways to remove them or change what they mean to the person. Perhaps the DV client could make sure there are no weapons around, play fewer violent video games,
listen to more benign music, or store their samurai memorabilia where it can’t be seen. With cognitive restructuring, it may also be possible to link old triggers to new behaviours. For example, coming home to a frowning partner may once have been the trigger for a cutting comment or the start of a conflict, but with practice could become the trigger for a concerned enquiry as to how their day was.

In the first instance, those predisposed to domestic violence can be taught to walk away from provoking situations. In the longer-term, helping the person to develop conflict resolution skills may assist them to manage provoking situations better, and the learning of relaxation and calmness techniques may reduce their predisposition to be provoked by, or overreact to, minor irritations. Cognitive restructuring around hostile biases will also help reduce the range of situations they find provoking.

Managing substance use will also be relevant for a great many DV clients. Usually, comorbid problems such as substance abuse would require separate treatment because therapy for domestic violence is less likely to be successful when those issues are not being specifically addressed (see Fals-Stewart, 2003).

*Opportunities for reappraisal*

Another key tenet of the GAM is that maximising the opportunities for re-appraisal, in most cases, will reduce the likelihood of aggression. In practice, this means making sure that during conflicts the DV client has the time and the mental resources to think through the consequences of each possible response and to choose the most adaptive one. Being intoxicated or under the influence of stimulants will disinhibit immediate responses and
undermine such processes, so sobriety during conflicts will be important. Also important will be managing levels of emotional and physical arousal. In addition, the DV client, especially if male, will need a way of backing down from an aggressive response without ‘losing face’.

To facilitate reappraisal during conflicts, the therapist might run through role plays of various conflict scenarios and have the DV client practice strategies that increase their time and mental resources for reappraisal. Various alternate scripts for behaviour and their consequences might be discussed, along with strategies for backing down from conflict without feeling a loss of self-esteem.

Conclusions

The General Aggression Model provides a helpful lens through which practitioners can understand both instances of domestic violence and the long-term acquisition of domestically violent behaviours. Although the GAM and the GLM are not a sufficient resource for therapy alone, they provide a range of principles and concepts that can guide the therapist as to what information is important to know from their client, and what types of interventions may be effective in reducing the risk of DV in clients. It is hoped that future research on the GAM extends to include findings that specifically examine the way that key tenets of the GAM underlie the behaviours of those who are domestically violent, and the efficacy of intervention approaches based on GAM principles.

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References


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Figure 1: General Aggression Model. From Anderson & Anderson, 2008. Reprinted by permission.