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The Evolving Science of Anger Management

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Abstract

This study reviews relevant literature on: 1) treatment outcomes for anger management programs, and 2) research on emotional process work during treatment. It is argued that relying on conscious deliberate cognition to regulate emotion is not effective for individuals who have long periods of intense emotional arousal. The most significant problem is the refractory period during which cognition is governed by emotion, allowing only thoughts that confirm, justify, or heighten the emotion. Up until now, these two fields of inquiry have remained relatively separate. A call for further research is made after examining the results of a pilot study by the author. Descriptive statistics reveal significant progress following a three month treatment period with outcome data collected at the end of treatment and at a three month follow up. The conclusion is that violence prevention programs based primarily on psychoeducational and cognitive behavioral methods are not the only method for addressing the problem of anger, and perhaps not as effective as other options. Further research is needed to determine if those with severe anger and rage problems require the integration of emotional process work along with traditional treatment approaches.

The Evolving Science of Anger Management

When anger becomes a problem, to the point that it interferes with healthy living, the resulting disorder is often characterized by acts of violence and/or verbal abuse. Accordingly, it has been found that in violent heterosexual relationships both husbands and their wives are angrier than their martially distressed but nonviolent counterparts (Jacobson et al, 1994). Perhaps this is why counseling focused on the treatment of this singular emotion has become closely associated with batterer intervention programs. The traditional view of violence in a relationship focused on a crime of abuse involving two individuals in an opposite-sex (heterosexual) marriage. This is the origin of the term "domestic violence," which addressed the manifest abusive behavior associated with excessive anger, within the context of a domestic relationship. Initially it was assumed that the responsibility for violence was unilaterally men's while the costs were unilaterally women's, thus the focus of intervention was specifically to end violence against women. However, emerging research has not supported this view. For example, Whitaker, Haileyesus, Swahm and Saltzman (2007), analyzed data on 11,370

US adults aged 18 to 28 from the 2001 National Longitudinal Study of Adolescent Health. They found almost 24% of all relationships had some violence. Interestingly, this study found that half of those relationships were reciprocally violent; that is, both partners assaulted each other. Furthermore, in those relationships where the violence was unilateral, women were the perpetrators in more than 70% of the cases. As societal views expanded and problems with violence within same-sex relationships emerged, it became apparent that the roles of abuser and victim are not gender-specific nor is the use of violence limited to just one partner (Marrujo & Kreger, 1996). In 1993, the term “intimate partner violence” was introduced by the US Department of Justice thus encouraging a broader understanding of violence in relationships (Rennison & Welchans, 1993).

While the social value of violence intervention programs for both men and women is undeniable, there have been serious questions raised about their practical value (i.e., are they generally effective?). Unfortunately, the field has been characterized by an exceptionally high rate of recidivism (i.e., continued violence and abuse) and attrition or dropout (Arias, Arce, & Vilariño, 2013; Babcock & Steiner, 1999). Presently, there is a very limited amount of treatment outcome research on violence in intimate relationships (Akoensi, Koehler, Lösel, & Humphreys, 2013), and no research on the effectiveness of treatment approaches for same sex couples (Stith, McCollum, Amanor-Boadu, & Smith, 2012). The research reviewed below is reflective of that limitation.

In an influential study, Rosenfeld (1992) analyzed 25 outcome studies and found that men, identified as batterers, who completed treatment had only slightly lower rates of recidivism than those who refused treatment, dropped out, or who were arrested and not referred to treatment. Later, in a relatively large study, Gondolf (1997) evaluated the outcomes of 840 individuals receiving treatment from well-established batterer intervention programs that sought to regulate anger using cognitive behavioral interventions. The results indicated that 39% of the participants reassaulted at least once during the 15-month follow-up, 70% engaged in verbal abuse, and 43% committed threats of violence during that time. In a more recent meta-analysis conducted by Babcock, Green & Robie (2004), 17 quasi-experimental and 5 experimental studies were analyzed. For those studies measuring recidivism by police report, those with an experimental design had an average treatment effect of $d = 0.12$ and those with a quasi-experimental design had an average treatment effect of $d = 0.23$, showing a significant but small impact on recidivism for both types of studies. For the studies measuring recidivism by partner report, those with an experimental design had an average treatment effect of $d = 0.09$, representing a non-significant impact on recidivism, and those with a quasi-experimental design had an average treatment effect of $d = 0.34$, again representing a significant but small impact on recidivism. Babcock et al. note that, using the most conservative result, the treatment effect based on partner report in experimental studies ($d = 0.09$), treatment is responsible for an approximately one-tenth of standard deviation improvement in recidivism. In other words, a man who is arrested, sanctioned by the court, and treated, has a 40% chance of remaining non-violent versus a 35% chance of remaining non-violent for a man who is arrested and sanctioned but *not* treated. Feder (2005) also conducted a meta-analysis of batterer intervention program (BIP) outcome studies, using more rigorous inclusion criteria than did Babcock et al (2004), resulting in a sample of 4 experimental and 6 quasi-experimental studies. Again, treatment outcome was measured in terms of partner or police report of re-

assault. Based on police reports, the average effect size for experimental studies was $d = 0.26$, representing a significant but small effect – a reduction in recidivism from 20% to 13%.

Current accepted treatments appear not to be living up to the promise they once held and newer approaches remain controversial and often rejected by those on the frontlines (Arias et al, 2013). Even when positive results are achieved, these outcomes only represent a subsection of the population that was willing to remain in treatment for three months or more. One of the greatest problems facing traditional treatment programs is the exceptionally high dropout rate, in some instances as high as 90% (Gondolf & Foster, 1991). Even amongst individuals who are court-ordered, the dropout rates have been found to be as high as 69% (Babcock & Steiner, 1999).

Problems with Treatment as Usual

As expected, many individuals who come to batterer intervention programs for anger management respond to stress with excessive intensification of a singular negative emotion: anger (Holtzworth-Munroe & Smutzler, 1996). In addition this restricted emotional range; these individuals are also characterized by an excessive deactivation of emotion or alexithymia (Yelsma, 1996). In other words, at times there is too much emotional arousal, resulting in explosive behavior, and in other instances not enough, resulting in dissociation, difficulty recognizing and expressing needs, and inability to draw on social support, irrespective of gender (Kopper & Epperson, 1991; Short, 2001). For these individuals, whether male or female, the regulation of emotion is a solitary endeavor. Some rely on drugs, such as alcohol or marijuana, for their primary means of coping with emotion. Accordingly, White and Chen (2002) conducted a longitudinal study of 725 individuals and found that problem drinking significantly predicted IPV perpetration and victimization for both men and women. Others attempt to regulate emotion using psychological methods such as situational avoidance, self-punishment, or emotional suppression (Lisak & Hopper, 1996).

Before coming to treatment, many have made statements such as, "I can't talk about those topics anymore," or, "We are not going to the party because I cannot handle you flirting with other men" (i.e., the strategy of avoidance). Others will attempt to rectify the problem with harsh consequences, "I am a complete jerk and hate myself for what I did" or some will physically injure themselves after a violent outburst (e.g., smashing one's head against a hard object), in an effort to change their behavior (i.e., the strategy of behavior modification using self-punishment) and to communicate remorse (Short, 2001). And others attempt to manage the emotion by force of will, as reflected in statements such as, "Next time, I am going to keep a cool head and not let things get to me," or, "I'm done with being angry" (i.e., the strategy of emotional suppression) (Burns, Johnson, Mahoney, Devine, & Pawl, 1996). Perhaps one of the reasons these strategies fail is that none of them help troubled individuals learn how to benefit from their emotions or how to cultivate healthy, nondependent emotional connection with others (Murphy, Meyer & O'Leary, 1994). This is especially problematic because effective self-regulation appears to be dependent on and emerge from positive social connection (Johnson, 2013).

Ironically, many traditional treatment programs rely heavily on strategies that have the same general objective described above (i.e., inhibit anger). This is not to imply that reappraisal strategies, such as cognitive self-talk, do not work with certain types of anger, or that arousal reduction strategies such as relaxation training are without merit (e.g., Holtzworth-Munroe,

1995; Saunders, 2008). Rather, while it seems like a logical solution, the overall goal of inhibiting feelings of anger does not yield practical benefits for those who experience intense and rapid anger arousal. While traditional intervention programs also teach valuable relationship skills, these skills are difficult, if not impossible, to implement under circumstances of dysfunctional emotion. A major problem with any technique that involves conscious deliberation is that it requires fairly stable emotional functioning during the time of need.

While emotions which are based on faulty thinking (thus processed in the cortical regions of the brain) can be altered using methods of reason, the type of anger that is most likely to lead to violence occurs rapidly, in response to environmental triggers. In many instances, individuals referred to domestic violence programs report that their anger/rage overtakes them before they have time to think. This is amygdala-based emotional experience, or low-road processing, which initially bypasses the cortical regions of the brain. The anger agenda assumes an entirely dominant position as it affects learning, memory, attention, perception, and inhibition of emotion; all of this occurring before there is time for conscious recognition (LeDoux, 2003; Phelps & LeDoux, 2005). Or, as explained by Ekman (2003, p. 39), during emotional arousal the mind enters into a refractory state, during which conscious cognition cannot incorporate information that does not fit, maintain, or justify the emotion at hand. Instead, individuals tend to discount or ignore personal knowledge that could disconfirm the felt emotion, while also discounting information coming from the environment that does not fit the emotion. Similarly, recent research indicates that emotion affects attribution and explanatory processes (Forgas & Locke, 2005). For individuals with severe emotional disorders, this refractory period (i.e., the time during which emotions control thought) can last for hours, leading to major distortions in the person's judgment, decision making, his perception of his own behavior and the actions of others, as well as distortions in memory (Forgas & Bower, 1987).

As an example, a girlfriend, of a participant in the batterer intervention program described below, reported that while driving home he suddenly reacted with rage to something she said. He gripped the steering wheel with one hand while he punched her face with the other. Being quick tempered herself; she fought back but was not strong enough to prevent him from pushing her out of his truck, which was still moving at full speed. After walking the remaining three miles to their house, in a dress that was torn and bloody, she found the young man calmly sitting on the porch carving a piece of wood with a Bowie knife. As she stepped onto the porch, he looked her up and down and then exclaimed, "What the fuck happened to you?" He had no memory of what had transpired 30 minutes earlier. Later that week, when he came to counseling, he told me about his girlfriend's story, not knowing that the event had already been described to me by her therapist. With apparent sincerity, he asked, "Do you think shit like that could happen and me not remember, or do you think she is making it up?" After many weeks in counseling, significant changes in this man's behavior were reported. According to the girlfriend, "I do not know what his therapist has done with him but he is not the same man...he has never [before] been so kind." As one might imagine, cognitive behavioral interventions were not relevant to this person's needs. His problems required a multifaceted approach that included motivation strategies, emotional process work, attachment therapy, and traditional techniques such as learning time-out (Short, 2001).

As any who have been seriously angry know, with anger there is an instinctual impulse to move closer to the emotion trigger (Ekman, 2003). The risks associated with acting on this impulse are reflected in the expression, "You have to learn when to walk away." But this is not easy to do, especially while trapped in small confined spaces, such as a car. Still, those who study emotion have described time-out (i.e., removing one's self from the scene) as the first line of intervention (DiGiuseppe & Tafrate, 2007; Ekman, 2003). Having collected self-report data from a wide variety of individuals seeking help with anger management, I too have found that a majority of men and women describe time-out as a helpful "tool." When taught correctly, and rehearsed in role-play, this avoidance strategy can be used effectively to remove potentially violent individuals from events or conversations that are about to trigger overwhelming feelings of anger. While the strategy of moving away from environmental triggers provides temporary safety (if both participants are willing to walk away from the interaction), it is still necessary to somehow transform the emotional narrative, otherwise "unresolved feelings" are likely to return in full force the next time a similar situation is experienced.

While researchers who argue for the use of emotion suppression strategies note that individuals high on features of borderline personality disorder self-reported having a "better day" while using emotional suppression, during a three day period (Chapman, Rosenthal, & Leung, 2009), they fail to document what happened a few days later, when this temporary fix stopped working. Those who have experience in domestic violence know that it is not uncommon to hear reports of successful attempts to suppress anger for two or more weeks, before the inevitable blow-up. This eventual discharge is likely to occur even when the suppressed anger is no longer relevant to the immediate situation (Ekman, 2003). Contrary to the study listed above, there is greater evidence that the suppression of emotion is associated with an increase in negative emotions, greater stress, and increased problems with physical health (Dalgleish, Yiend, Schweizer, & Dunn, 2009; Kiecolt-Glasser, McGuire, Robles, & Glasser, 2002; Pennebaker, 1995, 1997; Pennebaker, & Francis, 1996). For these reasons, in programs that focus on explosive anger, some type of emotional process work is indicated.

Using Emotion to Change Emotion

The finding that emotion can be used to effectively change emotion has been documented in various independent studies (Davidson, 2000, Fredrickson, Mancuso, Branigan, & Tugade, 2000). This is particularly true when negative emotion is exposed to positive emotion. For example, Fredrickson et al., (2000) found that resilient individuals cope by recruiting positive emotions to undo negative emotional experience. The same researcher found that the experience of joy and contentment produces faster cardiovascular recovery from negative emotions than a neutral experience (Fredrickson, 2001). And perhaps most relevant to anger management, awareness and conscious articulation of bodily felt experience have been shown to down regulate emotional arousal (Lieberman et al., 2004; Schore, 2003). The core principle behind this approach to anger management is that increases in emotional range not only down regulate anger but also lead to greater capacity for reasoned thought and responsible behavior. Similarly, increases in emotional awareness provide a foundation for self-monitoring, which in turn increases one's capacity for self-governance. As

argued by Greenberg (2012, p. 700), "Without conscious articulation, the depth, range, and complexity of emotion cannot develop beyond its instinctual origins."

Processing Anger

When behaviors, or the emotions associated with the behavior, are frightening to the care professional, there can be a rush to change. Under such circumstances, there is an unconscious avoidance or shutting down of the feared emotion, in this case, anger. If the client's anger has been dangerous, then it is natural for the therapist or counselor to not want the client angry during treatment. However, the findings of affective neuroscience indicate that emotions, and affect, must be evoked to effect change (Högberg, et al., 2011). In cases of anger management treatment, it is the negative emotion, anger, which must be processed first. While doing this, professionals should resist the urge to fix problems and correct beliefs instantly. Instead there is an acceptance of what is happening in the moment and an attempt to understand the client's logic (Johnson, 2004). When an environment of acceptance and safety is successfully established, clients become more willing to share personal information and nondefensively reflect on their emotional experiences (Fosha, Siegel, & Solomon, 2009; Short, 2001). Because emotion is fast, when process work is conducted in a slow methodical manner, gaps are created into which new thoughts or other emotions easily pour. As explained below, it is the strategic introduction of positive emotions, such as compassion (or opposing negative emotions, such as remorse or regret) that distinguishes scientifically informed helpers from those who are merely good listeners.

It is essential to note that optimal emotional processing involves emotion activation combined with some type of cognitive processing of the activated experience (Greenberg, 2002). While emotional arousal is readily achieved by requesting a detailed narrative of some past emotional experience (e.g., "Tell me what was happening when you became angry?" "What sensations occurred in your body as the emotion became stronger?"), cognitive processing is achieved by requesting an analysis of events (e.g., "Why did you become so angry?" "What were you hoping to achieve?" "What mistakes did you make?" "What effect did you have on others around you?"). This type of reasoned thought is most likely to succeed if questioning moves the subject away from reliving the event to a new position of looking at the event as an outside observer. If the proper questions are asked during reflective processing, then a diversified emotional experience is created as additional emotions are aroused. Unlike inhibitory strategies, the goal is not to shut-off the experience of a particular emotion but rather to increase the amount of choice and responsibility for how one feels, thinks, and acts.

Furthermore, when an emotional memory state is reactivated by means of conscious attention, it temporarily enters into a labile state, during which the emotional memory is amenable to change. This is known as memory reconsolidation (Högberg, et al., 2011; Moscovitch & Nadel, 1999). Because it is the emotion memory structures that govern the automatic arousal of emotion in future situations, when the memory trace of the past is changed, future responses, under similar conditions, are also transformed. This is why it is important to encourage clients to recall past episodes of anger. However, during this process additional opposing emotions (e.g., compassion) are simultaneously activated, resulting in altered memory structures. Because memory reconsolidation occurs only after a memory is activated, it follows that emotional memories have to be activated during treatment in order to

change them.

Emotions that Mitigate Anger

A recent pilot study by this author indicates three emotions in particular that may be a good target for elaboration in anger management work due to their negative relationship to anger (i.e., these emotions seem to oppose one another). The strongest is *compassion* ($r=-.70$, $n=12$) followed by *joy* ($r=-.68$, $n=25$), followed by *pride* ($r=-.64$, $n=12$). Although a common expectation is that remorse will have a negative relationship with anger, that has not been supported by the data ($r=.08$, $n=12$). Similar to these results, other researchers have found that increases in self-compassion in the general population significantly predicted decreases in psychiatric symptoms, interpersonal problems, and personality pathology (Schanche, et al., 2011). There is also some evidence that anger and pride are opposing emotions with anger more closely associated with failure and pride more closely associated with success (Tausch & Becker, 2012).

In many instances, men who are identified as batterers have a highly restricted range of emotional expression. Perhaps as a result of social conditioning, these men only seem comfortable expressing anger or triumph. During treatment, when deeper emotional exploration is facilitated, it sometimes becomes apparent that anger was serving as a universal response, replacing other emotions, such as sadness or shame, which the individual seeks to avoid. Once the more situationally appropriate emotions are made available, the capacity for problem solving expands, as new thoughts and behaviors are made available. On the flip-side, there are some emotions that are closely associated with anger and which may serve to increase its intensity and/or duration. Ekman (2003) has identified three emotions that frequently occur in conjunction with anger: fear, disgust, and guilt. My own research supports the close relationship between anger and disgust during intense emotional episodes ($r=.73$). Fear and guilt do not yet appear to be closely related to anger, though at the time of this writing, the sample size was still small ($n=12$).

Because of the potentially close connection between anger, fear, and disgust, emotional process work on any of the three is indicated when seeking to improve anger management. It should be noted that the relationship between anger and hatred is also high ($r=.72$, $n=25$), though hatred is not classified as an emotion but rather a combination of visceral affect and attitude that does not behave as true emotions do (Ekman, 1992, 2003) and therefore hatred is not an appropriate target for emotional process work. Hatred might be better addressed through interventions designed to foster attitudinal shifts or through interventions designed to create attachment and bonding.

Pilot Study

In an unpublished pilot study conducted from 10/1/1994 to 9/30/1995, this author sought to measure treatment outcomes from a newly formed batterer intervention program. This program contained traditional elements of domestic violence treatment as well as emotional process work intended to increase emotional awareness and diversification of emotional experiencing and recall. At the time, this effort marked a radical departure from standard treatment based on CBT and feminist-oriented psychoeducational models. The study was designed to answer the question of whether the treatment outcomes from this newly

formed program would improve upon the results of more traditional programs in the field of domestic violence treatment.

Design and Procedure

In this quasi-experimental design, a treatment period of no less than three months in duration was introduced as the independent variable. Subjects in the treatment group received no less than 12 sessions of group counseling and as many as 15 visits. Each session was 90 minutes in duration. In addition to traditional methods used in other domestic violence programs, this treatment included emotional process work. In this new approach to treatment, emotions targeted for increased fluency included compassion both for self and for others. Remorse and self-consciousness were also targeted for increase in frequency and duration. These emotions were connected to situational factors in the home, at work, or any other setting where anger was occurring. This process work was conducted during a portion of the meeting that was no less than 50%, during each and every visit. Thus triggers were analyzed as feelings of anger were processed.

The dependent variable in this study was the presence of physically aggressive behavior before and after counseling. Because entrance into the program was limited to those who had confirmed instances of physical aggression, the instances of physical aggression prior to treatment was 100%.

Obvious shortcomings in the design of this research include lack of randomization, the absence of a control group or a comparison group and the absence of a double-blind. For these reasons the data analysis is rudimentary, which is fitting of a small scale pilot study as opposed to a true experimental design capable of determining causality.

Participants

Participants for this study were all male, between the ages of 30 to 57. The following statistics represent the total number of written referrals received by the treatment center from Dallas County Court's Family Violence Unit. Regrettably, meaningful data on the influence of external variables that might mediate outcomes (e.g., arrest, separation, demographics, severity of violence before treatment) are not available.

There were two separate groups of subjects for whom outcome data collected across a 21 month period. Each of these two studies consisted of a three month treatment period and a follow up interview three months after completing treatment.

During study 1 (1/1/1994 to 7/1/1994), there were a total of 47 written referrals from the courts for male participants. Of that population, 11 referrals never contacted the counseling agency (treatment refusal=23%). There were another 15 who dropped out of the program prior to completion (attrition=42%). Of the 36 who entered treatment, there were 21 participants who successfully completed the number of sessions ordered by the court (program completion=58%). Of that number, there were 12 participants for whom all data were successfully collected from an intimate partner (IP) (IP feedback=33%). It is this final group for whom the outcome data is reported in study 1.

During study 2 (4/1/1995 to 9/30/1995), there were a total of 59 written referrals from the courts for male participants. Of that population, 12 referrals never contacted the counseling agency (treatment refusal=20%). There were another 23 who dropped out of the program prior to completion (attrition=49%). Of the 47 who entered treatment, there were 24 participants

who successfully completed the number of sessions ordered by the court (program completion=51%). Of that number, there were 30 participants for whom all data were successfully collected from an IP (IP feedback=64%). It is this final group for whom the outcome data is reported in study 2.

Measures

The method of measurement consisted primarily of a qualitative interview conducted by phone with an intimate partner who served as a third-party observer to treatment effects. Interviews included the use of standardized, behaviorally specific questionnaires designed to answer the question of whether or not a three month treatment period significantly reduced the severity of abusive behavior. The method for obtaining this information consisted of four verbal prompts: 1) "Has any violence taken place while he was in counseling, in your opinion?" (If so, how often?), 2) "What is the most abusive behavior that has occurred while he was in counseling? (How often does it occur?), 3) "Are you presently concerned for you or your children's safety?" (yes/no), 4) "Do you feel that counseling made a noticeable difference? (How so?). As can be seen, the device was designed to be more sensitive to false positives for violence, rather than incorrectly obtaining false negatives. The final prompt contained a request for detailed elaboration to help ensure the meaningfulness of a negative response for violence. While the same information was collected as a self-report measure from program participants, for the sake of comparison, these responses were not used as the dependent measure.

In an attempt to control for any unintentional researcher expectancy effects during data collection, the treating therapist was not involved in any communication with the intimate partners of program participants. Rather, the person collecting the data was a female volunteer who was elderly and kind, with advocacy training so that she could help female respondents recognize and report behavior they may not have previously considered violence. The volunteer was in no way involved in the treatment program thus reducing the probability of biased interviewing. The interviewer was instructed to make clear that the call was not being monitored from the home, that each responder felt safe to talk, and to clarify that participation in the interview was strictly voluntary.

For 100% of court referrals, across both studies, recidivism data obtained from the judicial system was included in the analysis. For study 1, of those who attended at least 3 months of counseling 33% had their progress monitored through third-party assessment reports from the IP at the end of treatment and at the three month follow up. For study 2, of those who attended at least 3 months of counseling 64% had their progress monitored through third-party assessment reports from the IP at the end of treatment and at the three month follow up. In every single case, an attempt was made to establish contact with the intimate partner. In some cases, the third-party observer would not return calls or would decline to be interviewed.

Scoring

In this pilot study, progress was defined as no longer using acts of physical aggression. Any report of physical aggression from an intimate partner (IP) or from the court system was

coded at a positive for violence and thus a treatment failure. In addition to this dichotomy, another higher level of treatment outcome was assessed and identified as “remarkable progress” (RP).

The prompt used to qualify subjects for the category of RP was the question, “Do you think counseling has made a noticeable difference?” The qualitative data was coded as RP if the subject volunteered a clearly declarative statement about increased prosocial behavior following treatment. Examples of declarative responses that were coded RP include the following: "Absolutely! I am just so glad! Now he communicates better. He doesn't talk down to me anymore. It [counseling] has really made a difference for our entire family!" or "Yes. He is more relaxed now. [He] talks more. [He] is more willing to discuss problems." or "Oh yes! [He is] taking time- outs, talks more, controls his anger better, and thinks about what he is doing." or "Oh yea! His attitude, his temperament, his whole out-look is different!" or "Yes, it really did. He is more in control of himself and less hostile. He is a lot more under- standing and communicates better." or "Yes. He is more understanding in the way he talks. He is treating me with more respect." Ambiguous responses were not counted toward this measure.

Study 1 Outcome Data

The following descriptive statistics are representative of those men who completed at least three months of counseling and had their intimate partner's contacted for data regarding outcomes. Using self-report, the male subjects reported a significant change in their own behavior, as a result of the treatment program, in 100% of the cases. Confidential third-party reports (i.e., a description of his behavior by an intimate partner) agreed with program participant's reports in 83% of the cases. Some of the female partner's refused to comment (16%).

Using third-party reports as the final measure, following three months of counseling, there was a dramatic decrease in occurrences of anger and rage by the end of treatment, with 83% of the participants' self-reported progress confirmed by outside observers (n=17). By the end of a three month follow up, a total of 5 participants were rated as positive for aggression or violence, thus dropping the success rate to 76%. Amongst the longer-term group of successful outcomes, 50% of the outside observers reported "remarkable progress" in behavior that extended beyond the cessation of violence.

The rate of attrition for this period was still relatively high, with 44% of the men who came to the program at least once, failing to complete the program.

Study 2 Outcome Data

The outcome study was later replicated with similar results. Confidential third-party reports from the IP agreed with program participant's reports in 75% of the cases. None of the female partner's refused to comment.

Using third-party reports as the final measure, following three months of counseling, there was a dramatic decrease in occurrences of anger and rage by the end of treatment, with 91% of the participants' self-reported progress confirmed by outside observers (n=11). By the end of a three month follow up, a total of 3 participants were rated as positive for aggression or violence, thus dropping the success rate to 75%. Amongst the longer-term group of successful outcomes, 58% of the outside observers reported "remarkable progress" in behavior that extended beyond the cessation of violence.

The rate of attrition for this period was still relatively high, with 49% of the men who came to the program at least once, failing to complete the program.

It is important to note that in this second study 100% of program participants reported being violence free, even though it was later discovered through information from the judicial system that at least two of the individuals had been arrested again for violence. This underscores the importance of collecting outcome data from a third-party, rather than self-report.

Discussion ?

For the sake of comparison, ... At least one other program, which has shifted the treatment emphasis to increased emotional awareness and to empathy training (within the context of a DBT model) has reported similar success rates with dropout as low as 15% and recidivism at termination as low as 10% (Fruzzetti & Levensky, 2000), though in this study it is not indicated if the data was derived from self-report or observations from a third-party.

Causation is difficult to infer .. support subsequent experimental research

In sum, there is mounting evidence that violence prevention programs based primarily on psychoeducational and cognitive behavioral methods are failing to prevent violence. While some blame poor outcomes on those being treated, another possibility is that those responsible for providing treatment have adopted approaches which are not sufficient for this particular problem. Looking to the science of emotion, it is not difficult to see why the core principle of CBT (i.e., using conscious deliberate cognition to regulate emotion) is not effective for individuals who have long periods of intense emotional arousal. The most significant problem being the refractory period during which cognition is governed by emotion, allowing only thoughts that confirm, justify, or heighten the emotion. This is not to say that there is no place for CBT in anger management, however, its utility needs to be put into perspective. For those with severe anger and rage problems, emotional process work is needed, specifically, the use of emotion to change emotion. When an activated emotion is exposed to an opposing emotion, the new emotional experience leads to the construction of new narratives resulting in a new set of thoughts, behaviors, and memories (Greenberg, 2012). This may be due in part to a reorientation of attention in which there is a spontaneous reappraisal of what is occurring. This reappraisal quickly ends the emotional behaviors (Ekman, 2003) and is more likely to occur when noncomplementary emotions are activated.

As science evolves and adjustments are made to existing programs, it is important not to over-correct. For example, there are some valuable psychoeducational components in traditional programming, such as teaching time-out, training in conflict resolution, problem solving, and relationship repair. These are necessary in anger management work, but not sufficient. Following the same logic, I doubt that emotional process work alone would produce the best outcomes. This view is at least partially supported in an outcome study by Carryer and Greenberg (2010) who found that during the treatment of depression, the optimal rate of emotional arousal was 25% of the time in a given session. If this is generalizable to anger management work, it would mean that 75% of the session could still be dedicated to psychoeducational components, cognitive therapy, or other forms of treatment that address attitudinal issues and problems with attachment.

Perhaps the greatest obstacle to including emotional process work in treatment is the professional's own unconscious aversion to this frightening and potentially destructive emotion. Very few individuals wish to be exposed to another person's anger or rage. For those professionals who seek to cope with unresolved feelings of anger through suppression, this type of work is not a good fit. From my own experience and the science at hand, I have found that the transformation of anger begins with a close and confident observation of what is occurring, followed by an introduction of new emotional alternatives, which then drive new ways of thinking and acting. In this way, we do not over-correct problems of excessive anger by seeking to eliminate it entirely, but rather the experience of this emotion is transformed so that it can better serve the needs of the individual and those in his or her life.

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[Footnote: For those interested in a structured method for conducting anger management process work, Dr. Short has created a worksheet that can be completed during therapy or sent home with the client as a homework assignment. This counseling tool is available online at www.iamdrshort.com/anger.]