

EXAMINING THE VALIDITY OF THE VIOLENCE REDUCTION TREATMENT  
PROGRAM STAGES OF CHANGE VIDEOS

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A journal article submitted in partial fulfillment of  
the requirements for the degree of  
Master of Arts

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Mount Pleasant, MI  
October 2017

## ABSTRACT

### EXAMINING THE VALIDITY OF THE VIOLENCE REDUCTION TREATMENT PROGRAM STAGES OF CHANGE VIDEOS

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Readiness to change has been of interest in the treatment of court mandated violent offenders as they are a population heterogeneous in their readiness to change. The present study examined the validity of a series of readiness to change video vignettes used in the Violence Reduction Training Program (VRTP). A sample of  $N = 144$  undergraduate students viewed the six stage of change videos and for each video completed the Anger Readiness to Change Questionnaire of Other (*ARCQ-O*), an adaptation of the Anger Readiness to Change Questionnaire (*ARCQ*; Williamson, Day, Howells, Bubner & Jauncey, 2003) to derive a readiness to change score for the characters depicted in vignettes. A within-subjects analysis of variance (ANOVA) determined a significant difference in readiness to change between characters who are intended to depict precontemplative, contemplative, and action as predicted,  $F(1.34, 140.47) = 694.18, p < .001$ . Additionally, data reduction through a Principal Component Analyses (PCA) using Promax rotation method with Kaiser normalization showed the *ARCQ-O* does not yield the same underlying latent subscale structure hypothesized by authors of the original *ARCQ*. The results of this study suggest that the videos used in VRTP do depict the intended stages of change and that the *ARCQ-O* is best utilized for assessing and measuring change on a continuum instead of discrete stages as has been the typical practice.

*Keywords:* readiness to change, Anger Readiness to Change Questionnaire (*ARCQ*), interpersonal violence

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## **Introduction**

### **Examining the Validity of the Violence Reduction Training Program Stages of Change Videos**

Violence has permeated every stretch of society from the beginning of time. Though violence may have once served as an adaptive behavior for mate selection, protection of offspring, and the general survival of our small group ancestors, the positive impact of violence in contemporary society has been challenged (DeWall, Anderson, & Bushman, 2011). Violence is costly both directly and indirectly. The Institute for Economics and Peace (Institute of Economics and Peace, 2014) estimated a global cost of violence at 9.46 trillion dollars in 2012 (or 11% of the Gross World Product). Violence also accounts for more than 1.6 million deaths each year, and is viewed as the leading cause of death for individuals between 15 and 44 years old (Krug, Dahlberg, Mercy, Zwi, & Lozano, 2002).

### **Causes and Theories of Violence**

While the costs and consequences of violence have mounted over time, many have theorized a source of this generally destructive behavior. Ancient Greek philosophers such as Plato and Aristotle were some of the first to hypothesize a reason for aggression in society, believing it served as a purging of emotion (Gentile, 2013). More recent analyses attribute violence to such factors as poverty, poor education, discrimination, and differential opportunities from success. The World report on violence and health (Krug et al., 2002) proposes an ecological model to understand the factors that lead to violent behavior. This model focuses on the factors that increase one's risk of committing violence on four different levels: individuals, relationships, community, and societal. The individual level identifies biological and personal history factors such as age, education, income, psychological or personality disorders, and

substance use. The relationship level examines how the nature of close relationships can increase one's likelihood of engaging in violence. For instance, having peers or relatives act violently may increase one's risk of becoming violent. Risk factors at the community level include aspects such as population density, high levels of unemployment, or a local drug trade presence. Lastly, societal factors can setup the inhibition or encouragement of violence through aspects such as the availability of weapons, social or cultural norms, political policies in place, or systematic social inequalities. Each act of interpersonal violence is likely to be a result of various risk factors from each level, but there is considerable variability across acts of violence. The cause of interpersonal violence is complex.

Psychological theories of violence and aggression have also evolved. In the early twentieth century, psychology still had some remnants of its philosophical based history (Leahey, 1992). Freud (1920) theorized that humans have an innate and unconscious death drive that motivates people to destroy and kill. Dollard and his colleagues postulated a frustration aggression theory, in which frustration primes aggression (Dollard, Doob, Miller, Mowrer, & Sears, 1939). Later in the century, Thibaut and Kelley (1959) explained violence using an operant conditioning paradigm that people will act violently when they perceive the rewards for acting aggressively outweigh the potential costs. Bowlby's attachment theory explained violence and aggression as a result of frustration from separating from one's parents or aversive parental reactions (Bowlby, 1958, 1959, 1960). Social learning theory has also been used to explain violence, hypothesizing that individual behavior develops as a result of others modeling behavior, vicarious reinforcement, or direct instruction (Bandura, 1973). Tomkins' script theory (1979) implied people learn violence and aggression through scripts that come about through social interactions and their scripts subsequently guide future behavior. Excitation transfer

theory, as proposed by Dolf Zillmann (1983), proposed that violence occurs due to misattributed heightened arousal. Berkowitz's 1989 cognitive Neoassociation theory emerged shortly after excitation transfer theory. Violence was explained by aversive events that produce a negative effect, that, when restimulated, results in violence.

The current leading theory of violence, the General Aggression Model (GAM), was proposed by Anderson and Bushman (2002). This theory takes into account the biological, environmental, psychological, and social factors that influence aggressive behavior. According to GAM, aggression occurs in a single episodic cycle during a social interaction with three phases (DeWall, Anderson, & Bushman, 2011). The first phase is the person and situation inputs, such as the individuals' traits, gender, beliefs, attitudes or the aggressive cues, provocation, drugs and discomfort that may be a part of the specific situation. These input variables then generate internal states such as cognitions, affect, and arousal. The third phase of an episode is the outcome of appraisal and decision making. In essence, the input variables and internal states interact with decisional processes to determine how aggressive an individual will act in the specific episode (Anderson & Bushman, 2002).

### **The Specific Problem of Intimate Partner Violence**

Regardless of the causes of violence, individuals, as well as society as a whole, are consistently forced to deal with the costs of violence. The most basic form of aggression is between individuals and can involve threatening or harming another individual (Renzetti & Edleson, 2008). This includes forms of violence within one's family such as that towards a child, partner or elder, or within the community towards an acquaintance or stranger (Krug et al., 2002). The problems of intimate partner violence are especially salient in today's society. Although all violent offenders are arrested for any criminal offense at similar rates, those who

were arrested for domestic violence were more likely to commit a new violent act and to do so against the victim in their original offense (Olson & Stalans, 2001).

Approximately a third of the population reports experiencing intimate partner violence, with 36% of women and 29% of men (Black et al., 2011). It is estimated that intimate partner violence accounts for 30% of the murders of women and 5% of the murders of men in the United States (Bureau of Justice Statistics, 2006). Though there are consistent instances of one partner being the perpetrator of intimate partner violence, often it is mutual. Some have found that rates as high as 74% of the couples seeking treatment for intimate partner violence experience bilateral or mutual physical violence (Madsen, Stith, Thomsen, & McCollum, 2012). In addition to the clear physical harm intimate partner violence has to those directly involved, intimate partner violence also contributes to socioeconomic disparities, a loss of investment in human capital, costly interventions, lost productivity, and overall a reduced quality of life including a reduced social cohesion (Waters et al., 2004).

### **The Criminal Justice System and Violence**

As Romkens (2006) points out, the criminal justice system is an essential means of addressing violence in modern society. Due to policy changes over the years requiring arrest and prosecution in certain states, regardless of victim consent, more and more violent offenders are appearing in court (Bell, Cattaneo, Goodman, & Dutton, 2013). Often the sentencing of the courts may entail jail time, fines, and required treatment programs to address violence and anger. One study found that proscriptions, fines, jail, and probation were the most common sentencings for domestic violent offenders (George, 2012).

The model and function of the court system is based on deterrence theory (Sherman & Berk, 1984). Deterrence theory suggests that violent offenders will avoid engaging in future

violence in order to avoid the consequences of their previous arrest. The consequences of the original arrest may not only be that of prosecution and conviction, but also sanctions against relationships with the victim such as no contact orders. Ventura and Davis (2005) found that offenders who were convicted were, in fact, less likely to be arrested again compared to those whose cases were dismissed. While similar studies have found consistent results (Felson, Ackerman, & Gallagher, 2005; Ford 2003; Ford & Regoli, 1993), other studies have found that there is no impact of court sentencing on rates of rearrests (Davis et al. 1998; Gross et al. 2000, Thistlewaite et al 1998; Wooldredge & Thistethwaite 2002). Arrests rates may reflect a true reduction in the behavior, or a reduction in the reporting of the behavior. For example, if an individual is arrested for hitting his wife, and is penalized with fines and jail times, the offense may occur again without reporting on behalf of his wife out of fear her husband will suffer the same penalties, impacting finances and disrupt other areas of life.

Residents of North America have the highest rate of contact with police (Harrendorf, Heiskanen, & Malby, 2010) and incarceration is proportionally higher in the United States than in any other country globally. In July of 2016, three percent of inmates in prisons were found guilty of homicide, aggravated assault or kidnapping offenses, while 16.8 percent were convicted for weapons, explosives, or arson. Another 8.2 percent were convicted for sex offenses; in total, this compromises over 50,000 inmates, not including the many who receive shorter stays in jail for less severe violent crimes (Bureau of Federal Prisons, 2016). In 1997, 5,726 violent criminals received prison sentences, which compromised 87 percent of all violent criminals convicted in that year (Reno, 1997). Little to no evidence suggests that incarceration reduces the likelihood to reoffend amongst domestic violent offenders as a whole (George, 2012). Wooldredge and Thistlethwaite (2005) found the effectiveness of incarceration was significantly dependent on

factors such as prior violent crimes, residential stability, severity of disposition, and offender race. When controlling for such factors, however, there was no difference in recidivism between those who were sentenced to jail and those who had their cases dropped (Wooldredge & Thistlewaite, 2005). Despite these findings, another study by Wooldredge (2007) found that the severity of a sentence was only a significant predictor of recidivism for those who served jail sentences, but not those who served prison sentences.

### **Treatment Programs for Violent Offenders**

In many cases, particularly intimate partner violence, offenders will endure a twelve to 36-hour jail stay immediately following arrest, accompanied by a no-contact order with the victim, to be then sentenced by to probation with a mandatory treatment program (Babcock & Steiner, 1999). The majority of states have now implemented protocols reflective of traditional programs for batterers, following a standard protocol based on a didactic approach. Treatment consistently provides psychoeducation on violence, power and gender issues, striving to challenge and re-educate men on preconceived notions on dominance over women, and improve communication skills and coping strategies (Babcock & Steiner, 1999). Typically delivered in group format for convenience, groups meet for approximately an hour and a half weekly from anywhere from two months to a year (Mills et al., 2012). Often the specific parameters of treatment are based on judicial requirements, and thus can vary by state.

As a primary means of preventing future violence, extensive research has examined the efficacy of treatment programs on reducing recidivism for the past 25 years, and though early research examined many nonexperimental conditions and lacked empiricism, there is currently active efforts to engage in more scientific methods of investigation (Eckhardt etc 2013). The earliest study (Davis & Taylor, 1999) to quantitatively review the effectiveness of treatment

programs examined only five studies and found a positive, but fairly inconsequential effect size ( $h = .41$ ). This was followed by a study just a few years later conducted by Babcock, Green, and Robie (2004) in which 22 studies found more small effect sizes ( $d = .09$  to  $d = .34$ ). Additional meta-analyses have found consistent results of small effect sizes (Feder & Wilson, 2005; Smedslund, Dalsbo, Steiro, Winsvold, & Clench-As, 2011), with some even finding an increase in violence following participation in programs (Feder & Wilson, 2005). More recently, Eckhardt and his colleagues (2013) completed a review summarizing the empirical support published on intervention programs since the 1990s. This review examined randomized or quasi-experimental designs that compared the intervention program to a relevant control. Of the studies meeting the appropriate scientific criteria and rigor, 20 compromised traditional forms of batterer intervention programs (BIPs) that targeted intimate partner violence, ten studies compromised alternative formats, while 31 others focused on working with victims exclusively. After reviewing the many studies involved, results on treatment programs lowering the risk of future violence remains unclear.

### **The Violence Reduction Program (VRTP)**

The Violence Reduction Program (VRTP) is a cognitive-behavioral treatment protocol used to treat court-mandated violent offenders for over 25 years, entailing 90 minute weekly sessions over the course of fourteen weeks. VRTP is traditionally delivered in group format, utilizing empirically supported methods for improving one's control over acting upon aggressive and violent behavior.

As research has found that those who struggle to control their violent impulses tend to also struggle with social problem solving, VRTP focuses on equipping group members with better problem solving skills through psychoeducation and skills training. This entails learning

how to identify external and internal anger cues, develop strategies to think out behavior before acting on it, and learning alternative coping mechanisms to acting out aggressively.

Accompanying the problem solving is improving communication skills which involves teaching reflective listening, dealing with confrontation, and practicing appropriate assertive communication to aid participants in their problem-solving ability and make them more effective in dealing with conflict with others. Video vignettes are used in every session to both demonstrate appropriate and inappropriate use of skills, and stimulate discussion.

Like any treatment, VRTP strives to keep participants motivated and engaged. In the first session, the participants view the “Readiness to Change Videos” and are taught about individual differences in readiness to change. The six vignettes in the video depict individuals at different stages in terms of their readiness to change (See Appendix C). Not only do these videos serve as a psychoeducational aid, but abet the therapists in assessing participants’ individual readiness to change, and are consistently referenced in sessions over the course of the program. Ronan, Gerhart, Bannister, and Udell (2010) examined readiness to change in group members of VRTP. It was found that participant readiness to change fluctuated throughout the course of treatment. Thus, the videos can be a useful tool in exploring participants’ readiness at various points in time.

### **Readiness to Change in Violent Offenders**

Increasing the effectiveness in reducing violence through treatment programs imperative. Many view the addressing of responsivity issues, which includes one’s readiness to change, to be one relevant means of improving treatment outcomes (Williamson, Day, Howells, Bubner, & Jauncey, 2003). Violent offenders are a heterogeneous group, and thus employing a means of assessing one’s readiness to change may be valuable to improving treatment outcomes. Howells

and Day (2003) argue that some violent offenders are not ready to engage in therapeutic change or treatment. Improving the understandings of where violent offenders are in terms of their readiness to change would aid clinicians in not only assessment, but also engagement (Burrowes & Needs, 2009).

The transtheoretical model of change (Prochaska & DeClemente, 1984) is one means of understanding readiness to change and has been applied consistently to the population of interest (Alexander & Morris, 2008). In order to be able to change their violent behavior, this model postulates that offenders go through stages of precontemplation, contemplation, preparation, action, and maintenance. In Prochaska & DeClemente's (1984) model, individuals deny a need to change in precontemplation, consider but take no action in the contemplation stage, clearly think about what will take place in the preparation stage, and then take active steps in the action stage, while maintenance merely involves self-monitoring and striving to adhere to their accomplishment of change. Individuals may not go through stages linearly, and often suffer relapses (Alexander & Morris, 2008).

Alexander and Morris (2008) assessed the validity of the stages of change model in predicting response to treatment of intimate partner violence offenders. From a sample of 210 court mandated males participating in a 26-week group intervention, they found that men who were in earlier stages of change reported fewer problems with anger, less abusive behavior, and fewer symptoms of distress than those who would be considered farther along in the stages of change, though there was no difference in the reports of the subjects' violent behavior from partners of perpetrators who indicated no anger problems or having anger problems. Further, this study found differential responses to treatment, so that higher scores on precontemplation were negatively associated with partner reports of violence six months following treatment

completion. Thus, it would appear readiness to change is related to reducing violence. Other studies have found complementary results. Scott and Wolfe (2003) found that individuals who were in the action stage had partners report less incidences of victimization than those in earlier stages. Trimble et al. (2015) examined the effectiveness of a brief cognitive therapy intervention for anger management, and found that offenders who were in the action and maintenance stages experienced significantly greater improvement in their anger expression.

As a means of addressing the interpersonal violence in modern society, efforts must be taken to prevent those who have engaged in violent behavior from reengagement, particularly related to intimate partner violence. An aspect of this lies with targeting areas within court mandated treatment programs, including that of one's readiness to change. The development of tools to teach stages of change are vital to this chain of violent behavior modification. Understanding the psychometric properties and validity of readiness to change tools will further allow research into how readiness to change plays a role in treatment and recidivism. The utilization of ineffective or inappropriate psychoeducational tools for readiness to change causes a lack of understanding in participants and an inability to appropriately recognize client readiness for treatment providers. The present study aimed to examine the validity of videos used to assess and teach readiness to change in court mandated offenders.

## Hypothesis

**Hypothesis one:** There would be a significant difference between readiness to change scores of videos so that characters in vignettes depicting action will have a higher mean *ARCQ-O* score than characters in vignettes depicting contemplation or precontemplation.

**Hypothesis two:** There would be a significant difference between readiness to change scores of videos so that characters in vignettes depicting contemplation will have a higher mean *ARCQ-O* score than characters in vignettes depicting precontemplation.

**Hypothesis three:** The exploratory factor analysis would reveal three underlying factors for the *ARCQ-O*, consistent with the precontemplative, contemplative, and action subscales of the *ARCQ* across video vignettes.

## Method

### Participants

Participants were volunteer undergraduate students who complete the study as credit towards course work. A total of 144 participants consented and participated in the study, however, after eliminating participants who did not respond to validity check questions randomly dispersed throughout the survey, only 125 were retained for full statistical analyses. Of the 125 participants ( $M_{\text{age}} = 20.15$ ,  $SD=0.16$ ), 31 identified as male while the remaining 92 identified as female. The majority of participants identified as Caucasian (88%), followed by Black/African American (9.6%). The mean grade point average of participants was 3.25 ( $SD = .046$ ). Of the sample, only 4% reported prior anger management treatment and 39.2% reported receiving any form of psychotherapy in the past. See Table 1 for further demographic information.

### Measures and Materials

**Demographics.** Demographic information was collected upon through use of a brief questionnaire requesting information about participants' gender, age, race/ethnicity, psychology courses taken and history of psychological treatment. See Appendix A.

**Anger Readiness to Change Questionnaire (*ARCQ*; *ARCQ-O*)-Of Other.** The Anger Readiness to Change Questionnaire (*ARCQ*; Williamson, Day, Howells, Bubner & Jauncey, 2003) is a 12-item measure adapted from the original Readiness to Change Questionnaire that measured change in regards to alcohol (*RCQ*; Heather & Rollnick, 1993). Like the *RCQ*, the *ARCQ* is derived from the Stages of Change model, and thus possesses questions to determine the stage in which a person is regarding their anger problems, be it the precontemplation, contemplation, or action stage (Williamson et al., 2003). Respondents react to the 12 statements on a five-point Likert scale that ranges from -2 (strongly disagree) to +2 (strongly agree).

Reliability within subscales of contemplation and action ( $\alpha = .79$  and  $\alpha = .78$ , respectively) were adequate, though precontemplation internal consistency was less impressive ( $\alpha = .58$ ) (Williamson et al., 2003). Upon scoring the measure to derive a single readiness to change score, the internal consistency is considered to be sufficient ( $\alpha = .82$ ). Regarding convergent validity, the *ARCQ* has demonstrated high correlations with subscales on the Treatment Readiness Scale,  $r = -.33$  to  $r = .55$ , (TRS; Serin & Kennedy, 1997) and between the continuum score and the *RCQ*,  $r = .60$ . Predictively, the measure has been shown to be related to prisoner improvement, predicting anger change, and used as a dependent variable in studies examining the effects of treatment, where those receiving treatment do change in their readiness, though it may be that predictability varies across stage dimensions and when effects were found they were typically statistically small (Williamson et al., 2003).

Williamson and colleagues (2003) assessed the construct validity of the ARCQ through means of a confirmatory factor analysis assuming three latent variables of precontemplative, contemplative, and action. Factors were found to be significantly different from zero, however, overall the model did not fit the data well,  $\chi^2(51) = 411.9, p < .001$ ; GFI=0.84; NNFI=0.77. Fit was improved by adding paths from action to two contemplation items.

The present study intended to examine the factor structure of the readiness to change of the individuals in the videos, and not of the persons completing the measure. Because of this, the original *ARCQ* was adapted to be asked in the perception of the person of the video, instead of the participant completing the measure, and thus, the Anger Readiness to Change Questionnaire of Other (*ARCQ-O*). For example, on the original *ARCQ*, the first question poses: “I don’t think I have too many problems with anger” whereas the revised Anger Readiness to Change Questionnaire of Other (*ARCQ-O*) poses the question “(Insert name of person in Video) doesn’t think (he/she) has too many problems with anger”. Participants respond to each of the twelve questions for each video they watched. See Appendix C for a full list of *ARCQ-O* questions and a side by side comparison of the original *ARCQ* and the adapted version used in the present study.

The response format and scoring mirrors the original *ARCQ*, with the 5 point Likert scale ranging from -2, indicating one strongly disagrees, to +2, indicating strongly agrees. A score was computed for each video in which questions on the precontemplation subscale were reverse coded and then all *ARCQ-O* items were summed, so that each video has a single readiness to change numeric score falling on a continuum from not to very ready to change. Scores were then averaged across the two videos for each stage of change. Internal consistency of the *ARCQ-O* corresponding to each video was relatively high, ranging from  $\alpha=.79$  to  $.86$ . Overall, reliability of the *ARCQ-O* scale was found to be  $\alpha=.81$ .

**Readiness to Change Videos.** “The Impact of Attitudes and Beliefs on Readiness to Change” is a video shown in the first session of VRTP. This video, a production of the Violence Reduction Training Program at Central Michigan University, and has been used in treatment groups since. These videos were made based on the types of clients frequently seen in VRTP, and often the pattern of offenses that mandated them to treatment. Designed to be a psychoeducational tool on readiness to change and stimulate discussion amongst group members, the video portrays six scenarios of individuals who are seeking treatment for a violent offense, each of which are in varying places regarding readiness to change. Each of the scenarios have a back story of the violent offense that brought them in to treatment that is told by the narrator, followed by actors performing the therapy session or describing the incident in greater detail. See Appendix D for descriptions of each of the scenarios presented in the videos.

### **Procedure**

Participants were recruited from a psychology student online subject pool. The entirety of the experiment was conducted online via the online survey system, Survey Monkey. Participants were presented with an online form in which they were required to type their name and the date in order to proceed to the next page of the experiment to indicate their participation was voluntary and willing, thus consenting to the study. Following consent, participants were presented randomly with one of the six videos on a separate webpage that they were able to start and pause at their own pace. On the same page were the twelve accompanying ARCQ-O questions for that video. After watching the video and answering the questions the participant then clicked a button to proceed to the next page in which one of the other videos was presented accompanied with the twelve ARCQ-O questions. This occurred for all six videos. The order of the six videos were randomized, but the twelve ARCQ-O questions were presented in the same

order, with three validity questions dispersed throughout the survey. Following completion of the six videos and accompanying ARCQ-O questions, participants were presented with the demographic questionnaire on a separate page. Following completion of the demographic questionnaire the study was completed.

## Results

**Preliminary Analyses.** A series of bivariate correlations were conducted to examine the relationship between demographic variables and the ARCQ-O scores. Demographic information included estimated cumulative grade point average, age, gender, and number of psychology courses. No significant correlations were found. See Table 2.

**Assessment of Videos.** To examine the first two hypotheses, a within-subject analysis of variance (ANOVA) was conducted to investigate differences in the readiness to change of persons in each video based on *ARCQ-O* scores. Assumptions of sphericity was violated,  $\chi^2(2)=71.04, p<.001$ , thus Greenhouse-Geisser analyses were used. With the dependent variable as the ARCQ-O scores, a significant main effect was found on stage of the videos,  $F(1.34, 140.47)=694.18, p<.001$ . Pairwise comparisons showed significant mean differences between all three stages in the predicted directions, with the action videos ( $M=13.21, SD=4.28$ ) significantly greater than contemplative ( $M=8.33, SD=4.4.09$ ),  $p<.001$ , and the precontemplative videos ( $M=-10.57, SD=5.92$ ) at the  $p<.001$ . The difference between contemplative and precontemplative (18.90) was also significantly different,  $p<.001$ . See Table 3.

A repeated measures ANOVA was run with the six videos independently using ARCQ-O scores as the dependent variable. Once again, Mauchly's test showed sphericity was violated,  $\chi^2(14)=122.10, p<.001$ , thus Greenhouse-Geisser analyses were used. A significant main effect of the videos was found on ARCQ-O scores,  $F(3.10, 325.13)=404.99, p<.001$ . Post hoc

analyses revealed that videos' mean readiness to change scores were all significantly different from one another with the exception of the two videos intended to portray precontemplation. Precontemplative Video A did not have a statistically different mean ARCQ-O score ( $M=-10.64$ ,  $SD=6.87$ ) than Precontemplative Video B ( $M=-10.50$ ,  $SD=6.78$ ),  $p=.831$ . Both precontemplative videos differed significantly from the other four videos. Interestingly, both other sets of videos, contemplative and action, each respectively differed from their paired video significantly. See Table 4.

**Exploratory Factor Analyses.** To examine the third hypothesis and investigate the underlying factor structure of the ARCQ-O, a series of Principal Component Analyses with Promax rotations conducted. Each video's components had a differential makeup.

*Precontemplative videos.* Precontemplative Video A yielded a Kaiser-Meyer-Olkin (KMO)=.87, and a Bartlett's Test of Sphericity  $\chi^2(66, N=119)=595.91$ ,  $p<.001$ , indicating the analysis appropriate. The PCA using Promax rotations converged after three iterations to yield three components, the first component ( $\lambda=5.31$ ), which consisted of six action and contemplative items, accounted for 44.26% of the variance. The second component ( $\lambda=1.24$ ) accounted for 10.34% and was predominantly precontemplative items. The third component ( $\lambda=1.01$ ), consisting of only one item ("Steve is entitled to get angry, but sometimes goes too far"), accounted for 8.43% of the variance. See Table 5.

Precontemplative Video B also yielded an appropriate Kaiser-Meyer-Olkin (KMO)=.89 and Bartlett's Test of Sphericity,  $\chi^2(66, N=121)=616.65$ ,  $p<.001$ . Again, the PCA with Promax rotations converged after three iterations to yield two components. The first component consisted of ten items, and accounted for 44.18% of the variance ( $\lambda=5.30$ ). The second component accounted was made up of only two items, and accounted for 11.67% of the variance ( $\lambda=1.40$ ).

The item makeup of the second component consistent of the item that loaded independently as the third component on the first precontemplative video (“Richard is entitled to get angry, but sometimes goes too far”) in addition to a precontemplative item, “Richard doesn’t think he has too many problems with anger.” See Table 6.

**Contemplative Videos.** Contemplative Video A had a Kaiser-Meyer-Olkin (KMO)=.76 and Bartlett’s Test of Sphericity,  $\chi^2(66, N=120)=495.23, p<.001$ . Two components were extracted from the sample within three iterations using a PCA with Promax rotations. The first component ( $\lambda=4.15$ ) accounted for 34.55% of the variance. The second component ( $\lambda=2.00$ ), consisting entirely of action items, accounted for 16.67% of the variance. The third component ( $\lambda=1.61$ ), accounting for 9.67%, consisted of only one item as seen in Precontemplative A (William is entitled to get angry, but sometimes goes too far). See Table 7.

Contemplative Video B followed a similar pattern. The Kaiser-Meyer-Olkin (KMO)=.77 and Bartlett’s Test of Sphericity,  $\chi^2(66, N=125)=392.58, p<.001$ . Three components were extracted after five iterations using PCA with Promax rotation. The first component ( $\lambda=3.89$ ) made up 32.45% of the variance and contained precontemplative and contemplative items. The second component ( $\lambda=1.65$ ) contained action oriented items and made up 13.78% of the variance. The third component ( $\lambda=1.054$ ) explained 8.76% of the variance and was made up only of the item, “Karen is entitled to get angry, but sometimes goes too far.” See Table 8.

**Action Videos.** For Action Video A, the Kaiser-Meyer-Olkin (KMO)=.89 and Bartlett’s Test of Sphericity,  $\chi^2(66, N=120)=451.45, p<.001$ . PCA extracted three components in five iterations which was then subjected to Promax rotations. The first component ( $\lambda=4.71$ ) accounted for 39.28% of the variance, while the second component ( $\lambda=1.16$ ) accounted for 9.68%; the third component ( $\lambda=1.02$ ) accounted for 8.46% of the variance. The first component consisted

primarily of items characteristic of precontemplative and action. The second component was made up of only items. The last component, consisting of two items, once again pulled the contemplative item “Mark is entitled to get angry but sometime goes to far” in addition to a precontemplative item, “Mark thinks it’s a waste of time thinking about anger”. See Table 9.

Action Video B yielded loadings similar to the pattern described in the previous analyses. The Kaiser-Meyer-Olkin (KMO)=.87 and Bartlett’s Test of Sphericity,  $\chi^2(66, N=124)=581.70$ ,  $p<.001$ . The PCA yielded two components after three iterations and used Promax rotation. The first component ( $\lambda=5.07$ ) accounted for 42.27% of the variance, and consisted primarily of items considered precontemplative and contemplative on the original ARCQ. The second component ( $\lambda=1.59$ ) accounted for 13.27% of the variance and contained items considered action oriented on the original ARCQ. Interestingly, the item, “Mary is entitled to get angry but sometimes goes too far” fell on the first component, an idiosyncratic feature not seen on the prior analyses. See Table 10.

## **Discussion**

The first two hypotheses predicted that the action videos would have the highest readiness to change scores, followed by contemplative, and precontemplative would have the lowest readiness to change scores. The within-subjects analysis of variance (ANOVA) suggested we reject the null and accept the alternative for both of these hypotheses, signifying the videos used in treatment do depict the intended readiness to change stage, relative to the other videos shown.

The differences seen between the videos suggest there are distinct areas of readiness to change; that is, readiness to change exists in levels and the videos depicted show the levels intended. The videos portraying action had the highest ARCQ-O scores, as intended by the video

creators, and thus portray individuals who are far along the readiness to change continuum to the lay person. Someone at this end of the continuum would be actively making and maintaining changes in their life. The videos portraying precontemplation had the lowest ARCQ-O scores, as intended by the creators, and thus portray individuals lowest on the readiness to change continuum to the lay person. Someone at this end of the continuum would be absent of any behavioral changes and would support the belief that their anger is not problematic. The videos portraying contemplation bisected the difference between precontemplation and action on the continuum. This would indicate that the individuals in the videos are not necessarily making behavioral changes but have the belief that the anger is problematic.

The two contemplative videos differing from one another may suggest, despite both falling in between the precontemplative and action videos, that the two contemplative videos still fall in different locations on the continuum though both still bisect precontemplative and action. The same is seen with the two action videos. Both videos can be seen on the higher end of the continuum relative to the other videos, but Action B showed to be further along on the continuum than Action A. This may just be an example of the individual differences seen in clients and further exemplifying the fluid nature of the continuum in which individuals cannot be discretely categorized.

An alternative explanation may be demographic characteristics of the actors and actresses in the videos. The precontemplative videos were not significantly different from one another and both characters depicted were males. For both the contemplative and action video, only one of the videos depicted a male and the other a female. The videos with a female character were significantly higher than their male counterparts. This may be because females are perceived as less angry than males and thus have less anger to change, or that they are more willing to engage

in behavioral change and thus will be further along on the continuum than their male counterparts.

The third hypothesis regarded the underlying latent structure of the ARCQ-O, proposing it would reflect the latent structure Williamson et al. (2003) suggested underlie the ARCQ. However, support for this hypothesis was not found.

While the original authors of the ARCQ conceptualized subscales of precontemplative, contemplative and action, readiness to change has well been theorized to exist on a continuum of not ready to make behavioral change, to becoming more equipped and engaged in that change process. These discrete subscales did not emerge from the ARCQ-O, however it showed to be able to show differences in individuals based on the analyses of variance on the videos. Thus, the ideal use of the ARCQ-O is not discriminating into which discrete stage an individual falls, but instead is best utilized as a tool to aid in measuring change and assessment along an ever changing and fluid continuum of change.

Table 11 shows the summary of loadings across all six EFAs. The precontemplative items showed loadings across all three components. The first item loaded mostly on the first component, four times. Item five was the only item to load on all three components, however it still loaded primarily on the first component. This would suggest it does not behave psychometrically consistent across the different conditions. Item ten and twelve also loaded primarily on component one, five times, and component two only once. This suggests the precontemplation subscale may load on one component.

Contemplation items were dissimilar from the precontemplation. Item three had the most exceptional performance psychometrically, distinct from the other items on the ARCQ-O. While it only loaded once on the first component and once on the second component, it loaded four

times on the third component. The only instance in which it loaded on the second component was when the EFA had only yielded two components. Item three loading principally on the third component would suggest it is responsible for a separate underlying latent component and contributes less to the factor structure than the remaining items. This would suggest it performs psychometrically poor compared to the other items, and would not fit well with the other items. Items four and eight, also contemplation items, primarily loaded on the first component, five times, and only the second component once. The remaining contemplation item, item nine, loaded on component one four times and component two twice. This suggests that the subscale may consistently load on component one, with the exception of item three.

Action items were inconsistent from one another. Item two was similar to many of the precontemplative and contemplative items in which it primarily loaded on the first component, five times, and once on the second. Item six was the only item that loaded more on the second component four, than the first, two. Items seven and eleven both loaded evenly on components one and two. Action items thus did not load on the same component consistently.

In summary, only one item, item three, was seen to load primarily on the third component and only two items, item three and item five, loaded on all three. Further, two of the items in action, items seven and eleven, had split equivalency between components one and two. In all, no item definitively loaded on a single component; that is, no item loaded on a component all six times.

### **Limitations and Future Directions**

The present study had several limitations. The population was the most prevalent limitations. While the sample size was sufficient, a larger sample would be advantageous in increasing analytic power, as not all participants completed the study survey in its totality

questions in the survey. Further, the sample used not representative of the population the measures would be ideally used. In addition to the population being a college sample and having a higher mean education than the average offender, the sample was predominantly Caucasian female. Further research should be used before use on a clinical population. Additionally, analyses showed the ARCQ-O to be weak psychometrically, and thus its use for validating the videos diminishes the quality of the findings. While examining the measure was a part of this study, using a measure that has been well validated in the literature by sources above and beyond the measure authors would have been advantageous.

Researchers should consider validating videos for treatment providers to incorporate into protocols considering the efficiency and standardization that they can provide, particularly to populations that often have low reading skills. Future research will need to validate the “Readiness to Change Videos” on an offender population, and examine the predictive validity on treatment completion and re-offense. Further, future research will be needed to continue to explore the structure of the ARCQ-O to better understand its clinical utility. Alternatively, the predictive validity of a bystander assessing someone’s readiness to change is not fully understood and thus needs to be more thoroughly investigated as it may have practical implications for IPV couples’ treatment when perpetrators are known to be less than forthcoming with treatment compliance

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Table 1

<i>Participant Characteristics</i>		
	<i>n</i>	Percentage
Gender		
Male	31	24.8
Female	92	73.6
Relationship Status		
Married	2	1.6
Domestic Partnership /Civil Union	7	5.6
Single but Cohabiting	19	15.2
Single, never married	97	77.6
Race/Ethnicity*		
White	110	88
Black/African-American	12	9.6
American Indian/Alaskan Native	1	.8
Multiple Races	1	.8
Other	1	.8
Received Psychological Treatment		
Yes	49	39.2
No	75	60
Received Anger Management Treatment		
Yes	5	4
No	119	95.2
	<i>M</i>	<i>SD</i>
Age	20.15	.160
Cumulative GPA	3.25	.046
Number of Psychology Courses Taken**	5.81	.470

*Note.* \*For the category of Race/ Ethnicity, participants were given categorical options of Native Hawaiian or Other Pacific Islander but the category does not appear in the table because no participants endorsed the category in the present study. \*\*Number of Psychology courses taken refers to courses students have not only completed with any grade but courses currently enrolled in.

Table 2

*Correlations of Videos and Demographics*

	Precontemplative	Contemplative	Action
Age	.04	-.05	.05
Courses	-.14	-.09	-.10
GPA	-.16	.08	.05
Gender	-.15	-.01	-.04

*Note.* “GPA”=Estimated Cumulative Grade Point Average. “Courses”=number of psychology courses taken at the time of the study including those currently enrolled in.

Table 3

*Mean ARCQ-O Cumulative Scores*

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	Mean	<i>SD</i>
Precontemplative	-10.57	5.92
Contemplative	8.33	4.09
Action	13.21	4.28

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*Note.*  $N=106$ . All videos were significantly different from one another at  $p<.001$ .

Table 4

*Mean ARCQ-O Video Scores*

	Mean	SD
Precontemplative A	-10.64	6.87
Precontemplative B	-10.50	6.78
Contemplative A	6.75	5.48
Contemplative B	9.91	5.41
Action A	12.49	5.54
Action B	13.93	5.22

*Note.* Videos mean readiness to change scores were all significantly different from one another, with the exception of the Precontemplative Videos A and B; mean difference=.14,  $p=.831$ .

Table 5

*Loadings for “Precontemplative A” Video: Steve*

Item	Component		
	1	2	3
Steve has just recently changed how he deals with anger (A)	<b>.94</b>	-.15	-.19
Steve is actually changing how he deals with anger right now (A)	<b>.90</b>	-.11	.10
Anyone can talk about wanting to do something about anger, but Steve is actually doing something about it (A)	<b>.82</b>	.00	.18
Steve is trying to control anger more than he used to (A)	<b>.72</b>	.03	.02
Steve is at the stage where he things about managing his anger (C)	<b>.71</b>	.20	-.06
Sometimes, Steve thinks he should try to control his anger (C)	<b>.51</b>	.28	-.11
Steve would see controlling his anger to be pointless (P)	-.09	<b>.85</b>	.13
Steve doesn't think he has too many problems with anger (P)	-.08	<b>.82</b>	-.12
Steve would not think there is a need to think about changing how he deals with anger (P)	-.01	<b>.72</b>	-.02
Steve things it's a waste of time thinking about anger (P)	.17	<b>.48</b>	-.14
Steve thinks his anger is a problem sometimes (C)	.31	<b>.45</b>	.20
Steve is entitled to get angry, but sometimes goes too far (C)	.02	-.02	<b>.95</b>

*Note.*  $N=119$ . Principal Component Analysis Pattern matrix with Promax rotation. “C” denotes items intended to represent contemplation, “P” Precontemplation, and “A” action stages;  $\lambda_1=5.31$ , accounting for 44.26% of the variance;  $\lambda_2=1.24$ , accounting for 10.34%,  $\lambda_3=1.01$ , accounting for 8.43% of the variance.

Table 6

*Loadings for “Precontemplative B” Video: Richard*

Item	Component	
	1	2
Sometimes, Richard thinks he should try to control his anger. (C)	<b>.83</b>	.06
Richard thinks his anger is a problem sometimes. (C)	<b>.82</b>	.16
Richard is trying to control anger more than he used to.(A)	<b>.80</b>	.37
Richard is at the stage where he thinks about managing his anger. (C)	<b>.78</b>	.25
Richard would see controlling his anger to be pointless (P)	<b>.75</b>	.50
Richard thinks it’s a waste of time thinking about anger (P)	<b>.73</b>	.43
Anyone can talk about wanting to do something about anger, but Richard is actually doing something about it. (A)	<b>.68</b>	-.05
Richard is actually changing how he deals with anger right now. (A)	<b>.66</b>	-.02
Richard has just recently changed how he deals with anger. (A)	<b>.59</b>	.54
Richard would not think there is a need to think about changing how he deals with anger (P)	<b>.45</b>	.14
Richard doesn’t think he had too many problems with anger (P)	.30	<b>.78</b>
Richard is entitled to get angry, but sometimes goes too far. (C)	.21	<b>-.58</b>

*Note.*  $N=121$ . Principal Component Analysis Pattern matrix with Promax rotation. “C” denotes items intended to represent contemplation, “P” Precontemplation, and “A” action stages;  $\lambda_1=5.30$ , accounting for 44.18% of the variance;  $\lambda_2=1.40$ , accounting for 11.67%.

Table 7

*Loadings for “Contemplative A” Video: William*

Item	Component		
	1	2	3
William thinks his anger is a problem sometimes. (C)	<b>.81</b>	-.10	-.03
William would not think there is a need to think about changing how he/she deals with anger. (P)	<b>.77</b>	-.18	.02
William would see controlling his/her anger to be pointless. (P)	<b>.73</b>	.11	-.09
William thinks it’s a waste of time thinking about anger. (P)	<b>.72</b>	.05	-.21
William doesn’t think he has too many problems with anger (P)	<b>.69</b>	.01	-.01
Sometimes, William thinks he should try to control his anger. (C)	<b>.57</b>	-.02	.38
William is at the stage where he thinks about managing his anger. (C)	<b>.52</b>	.12	.06
William has just recently changed how he deals with anger. (A)	-.15	<b>.88</b>	.15
William is actually changing how he deals with anger right now. (A)	.00	<b>.87</b>	-.19
Anyone can talk about wanting to do something about anger, but William is actually doing something about it. (A)	.05	<b>.86</b>	-.14
William is trying to control anger more than he used to. (A)	.19	<b>.53</b>	.38
William is entitled to get angry, but sometimes goes too far.(C)	-.12	-.09	<b>.93</b>

*Note.*  $N=120$ . Principal Component Analysis Pattern matrix with Promax rotation. “C” denotes items intended to represent contemplation, “P” Precontemplation, and “A” action stages;  $\lambda_1=4.15$ , accounting for 34.55% of the variance;  $\lambda_2=2.00$ , accounting for 16.67%;  $\lambda_3=1.61$ , accounting for 9.67% of the variance.

Table 8

*Initial Loadings for “Contemplative B” Video: Karen*

Item	Component		
	1	2	3
Karen would not think there is a need to think about changing how she deals with anger. (P)	<b>.81</b>	-.13	.04
Sometimes, Karen thinks she should try to control her anger. (C)	<b>.74</b>	-.20	.18
Karen would see controlling her anger to be pointless (P)	<b>.74</b>	.06	-.07
Karen is at the stage where she thinks about managing her anger.	<b>.58</b>	.34	-.34
Karen thinks it’s a waste of time thinking about anger (P)	<b>.56</b>	-.15	-.01
Karen thinks her anger is a problem sometimes. (C)	<b>.50</b>	.24	.08
Karen doesn’t think she has too many problems with anger. (P)	<b>.49</b>	.02	.38
Karen is trying to control anger more than she used to. (A)	<b>.44</b>	.26	.06
Karen has just recently changed how she deals with anger. (A)	-.25	<b>.88</b>	.17
Karen is actually changing how she deals with anger right now. (A)	-.01	<b>.81</b>	-.06
Anyone can talk about wanting to do something about anger, but Karen is actually doing something about it. (A)	.01	<b>.75</b>	.06
Karen is entitled to get angry, but sometimes goes too far. (C)	.08	.11	<b>.90</b>

*Note.*  $N=125$ . Principal Component Analysis Pattern matrix with Promax rotation. “C” denotes items intended to represent contemplation, “P” Precontemplation, and “A” action stages;  $\lambda_1=3.89$ , accounting for 32.45% of the variance;  $\lambda_2=1.65$ , accounting for 13.78%;  $\lambda_3=1.05$  accounting for 8.79%.

Table 9

*Loadings for “Action A” Video: Mark*

Item	Component		
	1	2	3
Anyone can talk about wanting to do something about anger, but Mark is actually doing something about it. (A)	<b>.88</b>	-.02	-.08
Mark would not think there is a need to think about changing how he deals with anger (P)	<b>.86</b>	-.25	-.01
Mark would see controlling his anger to be pointless (P)	<b>.80</b>	-.14	.20
Mark is actually changing how he deals with anger right now. (A)	<b>.63</b>	.30	-.13
Mark thinks his anger is a problem sometimes. (C)	<b>.62</b>	.10	-.05
Mark is trying to control anger more than he used to.(A)	<b>.50</b>	.39	.00
Mark doesn't think he has too many problems with anger (P)	<b>.36</b>	.24	.06
Mark has just recently changed how he deals with anger. (A)	-.12	<b>.85</b>	-.16
Sometimes, Mark thinks he should try to control his anger. (C)	-.17	<b>.72</b>	.27
Mark is at the stage where he thinks about managing his anger. (C)	.11	<b>.59</b>	-.11
Mark is entitled to get angry, but sometimes goes too far. (C)	-.05	-.14	<b>.92</b>
Mark thinks it's a waste of time thinking about anger. (P)	.22	.28	<b>.52</b>

*Note.*  $N=120$ . Principal Component Analysis Pattern matrix with Promax rotation. “C” denotes items intended to represent contemplation, “P” Precontemplation, and “A” action stages;  $\lambda_1=4.71$ , accounting for 39.28% of the variance;  $\lambda_2=1.16$ , accounting for 9.68%;  $\lambda_3=1.02$  accounting for 8.46%.

Table 10

*Loadings for “Action B” Video: Mary*

Item	Component	
	1	2
Mary would see controlling her anger to be pointless (P)	<b>.81</b>	.01
Mary would not think there is a need to think about changing how he/she deals with anger (P)	<b>.80</b>	-.17
Sometimes, Mary thinks she should try to control her anger (C)	<b>.80</b>	-.03
Mary thinks her anger is a problem sometimes (C)	<b>.73</b>	-.03
Mary is at the stage where she thinks about managing her anger (C)	<b>.64</b>	.12
Mary is entitled to get angry, but sometimes goes too far (C)	<b>.63</b>	-.63
Mary thinks it’s a waste of time thinking about anger (P)	<b>.61</b>	.14
Mary is trying to control anger more than she used to (A)	<b>.56</b>	.38
Mary doesn’t think she has too many problems with anger (P)	<b>.48</b>	.22
Mary has just recently changed how she deals with anger (A)	-.13	<b>.84</b>
Mary is actually changing how she deals with anger right now (A)	.26	<b>.65</b>
Anyone can talk about wanting to do something about anger, but Mary is actually doing something about it (A)	.42	<b>.54</b>

*Note.*  $N=124$ . Principal Component Analysis Pattern matrix with Promax rotation. “C” denotes items intended to represent contemplation, “P” Precontemplation, and “A” action stages;  $\lambda_1=5.07$ , accounting for 42.27% of the variance;  $\lambda_2=1.59$ , accounting for 13.27%.

Table 11

*Summary of Loadings*

Item	Component		
	I	II	III
1. (Insert Name) doesn't think he/she has too many problems with anger (P)	4	2	
2. (Insert Name) is trying to control anger more than he/she used to (A)	5	1	
3. (Insert Name) is entitled to get angry, but sometimes goes too far (C)	1	1	4
4. Sometimes, (Insert Name) thinks he/she should try to control his/her anger (C)	5	1	
5. (Insert Name) thinks it's a waste of time thinking about anger (P)	4	1	1
6. (Insert Name) has just recently changed how he/she deals with anger (A)	2	4	
7. Anyone can talk about wanting to do something about anger, but (Insert Name) is actually doing something about it (A)	3	3	
8. (Insert Name) is at the stage where he/she thinks about managing his/her anger (C)	5	1	
9. (Insert Name) thinks his/her anger is a problem sometimes (C)	4	2	
10. (Insert Name) would not think there is a need to think about changing how he/she deals with anger (P)	5	1	
11. (Insert Name) is actually changing how he/she deals with anger right now (A)	3	3	
12. (Insert Name) would see controlling his/her anger to be pointless (P)	5	1	

## Appendices

## Appendix A

### Demographic Questionnaire

1. Are you male or female?
2. Which of the following best describes your current relationship status?
  - a. Married
  - b. Widowed
  - c. Divorced
  - d. Separated
  - e. In a domestic partnership or civil union
  - f. Single, but cohabitating with a significant other
  - g. Single, never married
3. Which of the following categories best describes your employment status?
  - a. Employed, working full-time
  - b. Employed, working part-time
  - c. Not employed, looking for work
  - d. Not employed NOT looking for work
  - e. Retired
  - f. Disabled, not able to work
4. Are you White, Black or African-American, American Indian or Alaskan Native, Asian, Native Hawaiian or other Pacific Islander, or some other race?
  - a. White
  - b. Black of African American
  - c. American Indian or Alaskan Native
  - d. Asian
  - e. Native Hawaiian or Other Pacific islander
  - f. From multiple races
  - g. Some other race (please specify)
5. What is your current age?
6. Please indicate your years of education
7. Have you ever received psychological treatment or counseling?
  - a. Yes
  - b. No
  - c. Unsure
  - d. Prefer not to answer
8. Have you ever undergone anger management of any sort?
  - a. Yes
  - b. No
  - c. Unsure
  - d. Would prefer not to answer
9. What is your estimated cumulative GPA?

## Appendix B

### Anger Readiness to Change Questionnaire of Other (ARCQ-O)

13. (Insert Name) doesn't think he/she has too many problems with anger.
14. (Insert Name) is trying to control anger more than he/she used to.
15. (Insert Name) is entitled to get angry, but sometimes goes too far.
16. Sometimes, (Insert Name) thinks he/she should try to control his/her anger.
17. (Insert Name) thinks it's a waste of time thinking about anger.
18. (Insert Name) has just recently changed how he/she deals with anger.
19. Anyone can talk about wanting to do something about anger, but (Insert Name) is actually doing something about it.
20. (Insert Name) is at the stage where he/she thinks about managing his/her anger.
21. (Insert Name) thinks his/her anger is a problem sometimes.
22. (Insert Name) would not think there is a need to think about changing how he/she deals with anger.
23. (Insert Name) is actually changing how he/she deals with anger right now.
24. (Insert Name) would see controlling his/her anger to be pointless.

## Appendix C

### *Comparing the ARCQ and the ARCQ-O Parallel Questions*

<i>ARCQ</i>	<i>ARCQ-O</i>	Readiness to Change Stage
I don't think I have too many problems with anger	(Insert Name) doesn't think he/she has too many problems with anger.	Precontemplation
I am trying to control my anger more than I used to	(Insert Name) is trying to control anger more than he/she used to.	Action
I'm entitled to get angry, but sometimes I go too far	(Insert Name) is entitled to get angry, but sometimes goes too far.	Contemplation
Sometimes, I think I should try to control my anger	Sometimes, (Insert Name) thinks he/she should try to control his/her anger.	Contemplation
It's a waste of time thinking about anger	(Insert Name) thinks it's a waste of time thinking about anger.	Precontemplation
I have just recently changed how I deal with anger	(Insert Name) has just recently changed how he/she deals with anger.	Action
Anyone can talk about wanting to do something about anger, but I am actually doing something about it	Anyone can talk about wanting to do something about anger, but (Insert Name) is actually doing something about it.	Action
I am at the stage where I should think about managing my anger	(Insert Name) is at the stage where he/she thinks about managing his/her anger.	Contemplation
My anger is a problem sometimes	(Insert Name) thinks his/her anger is a problem sometimes.	Contemplation
There is no need for me to think about changing how I deal with anger	(Insert Name) would not think there is a need to think about changing how he/she deals with anger.	Precontemplation
I am actually changing how I deal with anger right now	(Insert Name) is actually changing how he/she deals with anger right now.	Action
Controlling anger better would be pointless for me	(Insert Name) would see controlling his/her anger to be pointless)	Precontemplation

*Note.* *ARCQ*=Anger Readiness to Change Questionnaire (Williamson, Day, Howells, Bubner, & Jauncey, 2003); *ARCQ-O*= Anger Readiness to Change Questionnaire of Other; Both the *ARCQ* and *ARCQ-O* require responses on a 5-point Likert scale ranging from -2 (Strongly Disagree) to +2 (Strongly Agree).

## Appendix D

### Readiness to Change Videos

“The Impact of Attitudes and Beliefs on Readiness to Change” is a video shown in the first session of VRTP. Each of the scenarios have a back story of the violent offense that brought them in to treatment that is told by the narrator, followed by actors performing the therapy session or describing the incident in greater detail.

**Scenario One: Richard.** Richard is a 41-year-old male who pushed his wife during an argument. When the session begins Richard describes to the therapist how after a night at the bar, he returned home to get into an argument with his wife about his unemployment and drinking habits. Richard describes trying to ignore his wife, but her remaining persistent in the discussion. Richard reviews pushing her in order to get away, resulting in her hitting her arm on the coffee table. He describes being frustrated and how it was his wife who was attacking her, continuing to diffuse the blame. Richard makes reference to having been in treatment before and knowing what to do, and ends indicating his wife has the anger problem. Richard represents the precontemplation stage.

**Scenario Two: William.** William is a 28-year-old male who works as a mechanic, convicted for hitting his step-son in his eye. In his initial interview, he stated “I may have a problem with anger, but I don’t know what to do about it.” William intended to spank his son for misbehaving and not listening and disobeying commands. He describes grabbing the boy as he ran by to spank the child but instead hitting him in the eye, which resulted in swelling. Protective services were called when the child went to the emergency room, followed by William being forced to move out of his home, not being allowed to have contact with his stepson, and his wife filing for divorce. Despite wanting to make things right with his wife, William’s wife is resistant to work things out. William becomes emotional about hurting the child but remains adamant that “something had to be done.” He ends proposing alternatives to what he could have done instead of hitting the child, though still noting that other options had not worked in the past. He concludes by saying he must do something about how he handles his frustrations. In this scenario, William is intended to represent the contemplation stage.

**Scenario Three: Mary.** Mary is a 22-year-old female student who was mandated to treatment for hitting her boyfriend in the head with a beer bottle. The incident was stimulated over a disagreement about what to watch on television. Mary had hidden her boyfriend’s beer out of anger at him for changing the channel, resulting in her boyfriend attacking her. After she got away, she hit her boyfriend over the head with a beer bottle. Mary stated in her initial interview that “I realize that what I did was wrong. I don’t want to act this way anymore. Sometimes when I drink I get crazy.” While speaking with the therapist, Mary expresses problems controlling her anger and recognizing that she had some fault in the incident hiding the beer and needing help controlling her anger. When the therapist queried about what Mary has done in the past to control her anger, Mary expresses having talked things out before they got out of control, noticing her low level cues of anger. In this scenario, Mary is intended to represent the action stage.

**Scenario Four: Steve.** Steve is a 24-year-old male in a band who is in treatment who got into a fight over music preferences while listening to a rock band. The narrator makes it clear that Steve thinks himself a free thinker and defender of the common person's rights against the evils of government and society, resenting having to attend anger management classes. He is highly suspicious of the anger management course and leaders. The scenario shows him arriving early to session and refusing to fill out enrollment paperwork because he feels it is unnecessary and views it as a means of being controlled. He becomes aggressive with the counselor who informs him it is a part of the course and the video ends with Steve using vulgar language to tell the counselor off while slamming the paperwork on the table. In this scenario, Steve is meant to represent the precontemplation stage.

**Scenario Five: Karen.** Karen is a 33-year-old direct care worker, who assaulted another woman in the parking lot of a bar. Karen and her husband had been separated for months when she was at a bar and her husband was there with another woman. They ignored each other for the most part, but when Karen went to the bathroom the other woman who was with her husband went into the bathroom with her friend and began discussing details of their sexual relationships. Karen confronted her and told her she was a "slut" which she acknowledged was wrong, and did eventually leave. When Karen and her friend were in the parking lot trying to leave the other woman was coming towards her which she was convinced was because she intended to attack her. Karen punched the woman in the face and the woman hit her head on the ground. Karen describes not knowing why she hit her, and that it is uncharacteristic of her. She becomes emotionally distraught in talking about her behavior and its consequences. The therapist moves the discussion towards how fearful Karen is at her capacity to act so violently. Karen expresses needing help and wanting to be different. In this scenario, Karen is meant to represent the contemplation stage.

**Scenario Six: Mark.** Mark is a 31-year-old male house painter, who was arrested a year ago for malicious destruction of property over \$100. While at his girlfriend's brother's house, he became angry and purposely backed his vehicle into another vehicle owned by his girlfriend's brother. Mark previously struggled controlling his anger in the past, and completed a course on violence reduction training. He notes struggling sometimes and letting his anger get the best of him, but having a plan and already engaging in those behaviors to control his aggression. He describes the different ways he has learned to control his anger preventatively and consequentially since the incident and completing anger control courses. In this scenario, Mark is meant to represent the action stage.