

## **Emotion dysregulation in alcohol related intimate partner violence: a systematic review**

MARIO D'AGUANO<sup>1</sup>, VIVIANA LANGHER<sup>1</sup>, PATRIZIA VELOTTI<sup>2</sup>

<sup>1</sup> Department of Dynamic and Clinical Psychology, University of Rome "Sapienza"

<sup>2</sup> Department of Educational Sciences, University of Genoa

Email Corresponding author: [patrizia.velotti@unige.it](mailto:patrizia.velotti@unige.it)

### Abstract

This article aims to investigate the association between emotion dysregulation and alcohol related intimate partner violence. A systematic review was conducted through a literature research for relevant studies on Medline, CINAHL Plus with Full Text, Psycinfo and PsycArticle from inception through April 11, 2015. Additional articles were retrieved manually searching in reference lists. All relevant articles were accessed in full text. Data on study type; cases; controls; country; effect estimate; adjustments for confounders and quality of publication were extracted. The quality of the publications were scored by adherence to the STROBE and CONSORT 2010 checklists. Four studies satisfied the predefined criteria for inclusion and were included in this review. Results highlighted support for future research on emotion dysregulation and alcohol related intimate partner violence.

Keywords: Emotion Dysregulation, Intimate Partner Violence, Alcohol, Violence.

### Introduction

World Health Organization (WHO) defines intimate partner violence (IPV) as 'any behaviour within an intimate relationship that causes physical, psychological or sexual

harm' (Krug et al,2002). Research showed that IPV is associated with physical and mental health consequences for both men and women (Fletcher J, 2010). Women who experience IPV are more likely to show short- and long-term health consequences than women who have not experienced IPV (Black et al, 2011); and at times IPV can also lead to intimate femicide (Stöckl et al, 2013) .

Studies suggest that alcohol contributes in interpersonal aggression, but the alcohol's role in IPV is not so clear (.Leonard, 2005;

Wilson, Graham, Taft, 2014). Associations between IPV and alcohol use are highlighted (McKinney et al, 2010; Slep et al, 2010;Stappenbeck CA, Fromme K. 2010; Walton-Moss et al, 2005;), and abuse in alcohol consumption is associated with more male perpetrated violent behaviors ( Klostermann , Fals-Stewart, 2006; Tumwesigyea et al, 2009;; Martin et al, 2010). In fact, in men, drinking has been more often shown to play a role in IPV perpetration than it has been shown in women, reflecting the role of gender in both problem drinking and IPV (Graham et al, 2011, Giancola et al, 2009; White, Chen, 2002]. IPV and alcohol consumption could be both caused by a third factor, such as previous trauma or psychopathology (Devries, 2013).

Recently, studies have revealed that emotion regulation difficulties may be one of the underlying risk factor for psychopathology (Aldao,2010). Emotion regulation can be considered as a person's awareness, understanding, and acceptance of emotions, including the ability to appropriately employ strategies to control emotions and behaviors (Gratz, Roemer

2004). From this point of view, emotion regulation could play a key role in the association between alcohol and IPV. The link between emotion regulation difficulties and perpetration of aggression has been recognized in both men and women [Bushman et al, 2001; McNulty, Hellmuth, 2008;

Stuart et al, 2006;Tager et al,2010;Garofalo et al, 2015). Findings showed that IPV perpetrators have trouble with emotion regulation [Stuart et al,2006;

Gratz et al, 2009; Shorey et al, 2011) suggesting that regulation of negative emotion could have an important role in contributing to IPV. McNulty and Hellmuth (2008) found that husbands' variability in negative affect was related to increased intimate partner violence against wives. Victims refer that violent acts followed couple conflicts, when male partners experienced uncontrolled negative emotions (Stuart et al, 2006). Some scholars sustain that aggression could be an unsuccessful way of regulating negative emotions (Gratz et al, 2009; Shorey et al 2011) . A recent review (Shorey et al 2011) underlined that, among the reasons for the use of partner violence, express negative emotion was the second most commonly motive. In a study, Tager and colleagues (Tager, 2010) indicated that men who reported difficulty in regulating emotions were more likely to abuse their partners, especially when they also held beliefs that men should be emotionless and dominant.

Few studies have evaluated difficulties in emotion regulation as predictors of alcohol-related problems [Magar et al, 2008; Garofalo C, Velotti, 2014]; however, emotion dysregulation has been linked to alcohol misuse (Tripp, McDevitt, 2015). Individuals with alcohol dependence showed poorer emotion regulation abilities than the social drinkers (Fox et al

2008) and alcohol intoxication may contribute to aggression by interfering with both the ability to effectively regulate emotions and with behavioral responses (Stappenbeck, Fromme, 2014). It may be that people with more frequent and/or more intense negative emotions who also lack the abilities to regulate these emotions are more prone to alcohol abuse and then learn to use alcohol as a coping strategy (Veilleux, 2014). The present systematic review aims to elucidate the association between emotion dysregulation and alcohol related intimate partner violence.

### GOALS OF THE CURRENT REVIEW

This review aims to identify and summarize the best available evidence on emotion dysregulation and alcohol related intimate partner violence. To our knowledge, no systematic review exists addressing the role of emotion dysregulation on alcohol related intimate partner violence. In this review, the authors developed a research protocol regarding: the procedures for the handling of any disagreements; the specific objectives; the criteria for the selection and performance of the studies included and excluded; the criteria for the presentation of the results obtained; the approach to assess the quality of the included studies and the way by which graphics and conclusions will highlight it.

### METHOD

#### Search Strategy

An extensive literature search for relevant published and unpublished studies was conducted on Medline, CINAHL Plus with Full Text, PsycInfo and PsycArticle from inception through April 11, 2015. Additionally, we performed a search in Google Scholar and manually searched through the reference lists of included articles. The search criteria combined three separate domains: intimate partner violence, alcohol and emotion dysregulation. Comprehensive search strategies were developed using the controlled vocabularies of each database. We systematically searched for relevant studies using a combination of Medical Subject Headings (MeSH) terms and corresponding free-text terms. Search term and keywords were altered as per specification of individual database. The following MeSH terms and/or free text syntax were used for CINAHL Plus with Full Text : (MM "Intimate Partner Violence") OR (MM "Domestic Violence+") OR "ipv" OR intimate partner violence OR relationship abuse OR ((TX ( violen\* OR aggressi\* OR abus\* ) AND TX ( spous\* OR wife OR wives OR partner OR husband )); (MM "Alcohol Abuse") OR "alcohol abuse" OR (MM

"Alcohol-Induced Disorders, Nervous System+") OR (MM "Alcohol Drinking+") OR (MM "Alcoholism") OR "alcoholism" OR (MH "Alcohol Withdrawal Delirium") OR (MM "Alcohol Amnestic Disorder") OR (MM "Alcohol Withdrawal Syndrome") OR (MH "Psychoses, Alcoholic") OR (MM "Binge Drinking") OR (MM "Drinking Behavior+") OR TX alcohol\*; "emotion dysregulation" OR ( TX "affective dysregulation" OR TX "affective instability" OR TX "emotional lability" OR TX "emotion instability" OR TX "emotion dysregulation" OR TX "emotion regulation" OR TX "mood instability" OR TX "mood lability" OR TX "mood dysregulation" OR TX "mood swings" OR TX "autocontrol" OR TX "self regulation" OR TX "emotional control" OR TX "self control" ). No language restrictions were applied to the search.

#### Identification of Studies.

As shown in Figure 1 (that depicts the Prisma flow diagram), 2485 records were retrieved using the search strategy described above, and 2460 studies remained after removal of duplicates. In the initial screening, titles and abstracts were examined. If a title appeared potentially eligible but no abstract was available, the full-text article was retrieved. Two researchers (MD, PV) independently screened all titles and abstracts for eligibility. There was high level of agreement between raters. Any discrepancies (7 cases) were resolved by discussion between the authors or if they were unable to resolve (1 case), with a decision by a third independent scholar (VL). The final list of excluded studies was discussed among the three authors (see Table 1). Finally, a list of eligible studies was reached (see Table 2).

#### Study Selection Criteria

IPV was considered as a term more specific to violence occurring between intimate partners, supporting literature the need to study men and women as both potential victims and perpetrators when approaching IPV (Costa et al,

2015) . Moreover, studies highlight that incidents of IPV occurs within relationships of co-habiting and divorced couples as well as within those in same sex relationships (Johnson, Ferraro, 2000).

Alcohol measures of interest included both alcohol use and alcohol use disorders based on codes from the International Classification of Diseases (ICD) version 10 (World Health Organization, 1992). Studies examining only partner alcohol use were excluded.

Emotion dysregulation refers to deficits in one's ability to recognize, understand and accept emotions, engage in goal directed behaviours while experiencing negative emotions, and modulate the intensity and/or duration of emotional responses (Gratz, Roemer, 2004).

Population: Adult people aged 18–65 years will be included.

Comparisons: All studies, excluding case series and case studies, will be considered.

Exclusion criteria: People under 18 years. Case series and case studies.

#### Data extraction

Two reviewers (MA, PV) independently extracted information from the selected papers. Information comprised sample size and participants, sampling methods, measuring tools, description of the intervention and control group(s), and outcomes.

#### Assessment of study quality

The quality of the different studies was measured using the Strengthening The Reporting of Observational Studies in Epidemiology checklist (STROBE) (von Elm et al, 2007) and Consort Statement 2010 (Schulz et al,

2010). Each author counted items on the checklists as follows: -, item not reported; +, item reported but inadequately; ++, item reported adequately (see Table 3). Any disagreements (2 cases) between reviewers were resolved by discussion.

#### Results

As shown in Table 2, only four studies were categorized as effective for emotion dysregulation, alcohol abuse and violence. In the first laboratory study (Watkins et al, 2015) 137 participants (68 couples and 1 men) were recruited from a large university sample. This study aimed to examine the interactive effects of two emotion regulation strategies (rumination and reappraisal) and alcohol intoxication on intimate partner aggression perpetration. Each participant was randomly assigned to drink an alcohol (men were given a dose of 0.80 g per kilogram of alcohol mixed with orange juice, women were given a dose of 0.72 g per kilogram of alcohol) or a placebo beverage (orange juice and four milliliters of alcohol). Participants were asked to identify an unresolved matter in their relationship in which they became very angry with their partner. After alcohol administration, each participant was randomized to a rumination, reappraisal, or uninstructed condition. In each condition, participants were instructed to think about the previously mentioned matter. Variations both in affect (pre-post recall) and in anger were examined.

In addition, participants were informed that they would play a reaction time game against their partner. Before each of the two programmed trials, participants decide if - when they win and their partner loses - annoy with a white noise (determining the length and volume of noise) the headphones of their partner.

Two outcome variables were created by averaging the noise intensity and noise duration from the first trial and the second trial. In the first trial participants have not yet received an explosion of white noise from their apparent adversary, thus it provide the measure of unprovoked aggression. A measure of provoked aggression was given by the second trial that occurs following a blast of maximum intensity and duration perceived to come from the participant's partner.

Results shown that trait reappraisal, state rumination, and alcohol intoxication interacted to predict unprovoked intimate partner aggression (IPA), and that trait reappraisal was significantly related to unprovoked IPA among individuals who were given alcohol and instructed to ruminate. In provoked IPA, trait and instructed rumination interacted with alcohol intoxication to predict greater IPA perpetration. High trait rumination, rumination about an angering occasion, and alcohol intoxication seems to reduce the ability to manage aggressiveness.

In the second laboratory study (Stappenbeck, Fromme; 2014), 150 participants were recruited from a pool of university students, and through newspaper and Internet advertisements, flyers around the community and campus. The study examined the effects of alcohol intoxication, alcohol expectancies, emotion regulation, and emotional arousal on aggression in dating relationships. Three different conditions were created: 1) alcohol condition (participants were administered beverages contained a 1:3 mixture of 80-proof vodka); 2) placebo condition (participants received the same 1:3 ratio of decarbonated tonic to mixer); 3) no-alcohol condition (participants were given beverages of chilled water in an amount equal to the liquid they would have received in either the alcohol or placebo conditions). Participants were instructed to respond about their thoughts, feelings, and what they would do in response to a specific scenario. The Articulated Thoughts in Simulated Situations (ATSS) (Davison, 1983) was administered using different audio-taped scenarios: neutral, where a dating couple after a party have an ordinary conversation about the night and their upcoming plans; conflict, where a dating couple had a jealous interaction after a party and partners were upset with each other about their behavior at the event.

Results highlights that those individuals less able to reappraise showed more aggressive intentions in the alcohol conditions than those in the placebo and no-alcohol conditions. Further, individuals better able to reappraise in the no-alcohol condition articulated more aggressive intentions than those who received alcohol and placebo. No effect of suppression was significant.

In the third study (Schumacher, 2013) a sample of 97 participants with alcohol dependence and a pretreatment year history of IPV were recruited. This research examined the association between self regulation (i.e., impulsivity) and broad battery of neuropsychological tests of executive functioning (EF), and computerized delay discounting and behavioral inhibition tasks. Results shown that men reporting higher scores on impulsivity were more likely to engage in IPV on a drinking day than men reporting less impulsivity. In addition, men that evidenced better task performance were more likely to engage in IPV on a drinking day than men demonstrating poorer task performance. Differences in IPV were not evident on nondrinking days.

In the last study (Tharp et al, 2013) a total of 121 participants enrolled in residential substance abuse treatment were recruited. The study aimed to evaluate the role of

hostility, impulsiveness and emotion dysregulation in explaining IPV perpetration by men seeking alcohol treatment. Results evidence that impulsiveness predicted psychological and sexual IPV above and over emotion dysregulation and hostility, while hostility domain in the predicted physical IPV above and beyond emotion dysregulation and impulsiveness.

### Discussion

Intimate partner violence is one of the major public health problems and alcohol plays an important role in IPV (McKinney et al, 2010; Klostermann

Fals-Stewart,2006; Leadley et al, 2000; Campbell, 2002, Murphy et al, 2005). Studies found that in most cases, who perpetrated violence against partners was drinking at the time of the event. Also, the literature has shown that IPV involving alcohol use tend to be more severe and increase the likelihood of co-occurrence of other forms of violence (Murphy et al,2005; Murphy et al, 2001; Testa et al, 2003; Thompson, Kingree, 2006; Fonseca et al, 2009).

Alcohol's role in partner violence may be explained by: a) alcohol's direct physiological disinhibitory effect; b) people's expectations that alcohol will have a disinhibitory effect on behavior; c) people's justifications for their violent behavior using alcohol. However, it is also possible that the association between alcohol and violence have common predictors (Reingle et al, 2012; Field et al, 2004), such as emotion dysregulation.

The current review sought to address the role of emotion dysregulation on alcohol related IPV. In general, a limited literature has emerged examining the role of emotion dysregulation on IPV during alcohol abuse. Anyway, basing on the number of studies published in the last three years a possible new interest of research in this area seems to emerge. Although we found that most results of these paper confirm the importance of considering the role of emotion dysregulation when people drink, the variability in population and in types of these few initial studies limited their ability to deepen the understanding of the role of emotion dysregulation in alcohol related IPV.

Using random assignment to alcohol conditions the first two studies (Stappenbeck, Fromme, 2010; Watkins et al, 2015) confirmed that alcohol intoxication disinhibited aggressiveness and contributed to the emergence of verbal and physical violence; and that an association between trait emotion regulation and IPA existed (Testa et al, 2014). Specifically, reappraisal seemed to have a buffer effect: individuals with lower trait reappraisal were less able to control aggressiveness against their partner while individuals with higher trait reappraisal were able to continue to consider partner perspective during anger event, even in the presence of alcohol intoxication and rumination. This data are consistent with studies that have associated habitual use of reappraisal with sharing one's emotions and having closer relationships with others

(Velotti et al, 2015; Gross, Joh, 2003). Observational studies (Schumacher et al, 2013; Tharp et al, 2013) - both with a clinical population involved in residential substance abuse treatment – indicates impulsivity as moderator of alcohol related aggression; however, emotional dysregulation is a multidimensional construct.

#### Conclusions

In conclusion, this review found some support for an association between emotion regulation and alcohol related intimate partner violence. This finding lays the foundation for future research that will investigate the relationship between alcohol use and perpetration of IPV. Recently, some studies (Bateman et al, 2013) have underlined the importance of a focus on emotional awareness in psychotherapy as a first step to improve emotion regulation skills, as for example in the case of Metacognitive Interpersonal Therapy (Dimaggio, Attinà, 2012). From this point of view, improve specific emotion regulation facets (e.g., emotional awareness, impulsivity) during treatment could help in reducing both alcohol consumption and intimate partner violence. Accordingly, research need to unravel the construct of emotional dysregulation and focus on its component also in order to provide new insights in terms of treatment implications.

#### Strengths and limitations

Although an exhaustive search for literature was conducted in this systematic review in accordance to the highest reporting standards, this review is not without limitations. We have only conducted the search in electronic databases and studies published in local journals, which are not indexed in consulted database, might have been missed out in this review. Additional, articles written in any language were included, despite the search terms were all in English. Further studies are needed to better describe and compare the role of emotion dysregulation in intimate partner violence and to make possible a meta-analysis of the results.

#### Contributions of authors

Contributors MD, VL and PV contributed to the conception of the study. The manuscript protocol was drafted by MD and revised by PV. The search strategy was developed by all the authors and performed by MD and PV, who also independently screened the potential studies and extracted data from the included studies. VL arbitrate in case of disagreement. All authors assessed the risk of bias and approved the publication of the manuscript.

## References

1. Krug EG, Dahlberg LL, Mercy JA, Zwi AB, Lozano R. World report on violence and health. Geneva: World Health Organization 2002.
2. Fletcher J. The effects of intimate partner violence on health in young adulthood in the United States. *Social Science & Medicine* 2010;70(1); 130-135.
3. Black MC, Basile KC, Breiding MJ, Smith SG, Walters ML, Merrick MT, Chen J, Stevens MR. The National Intimate Partner and Sexual Violence Survey (NISVS). Atlanta, GA: CDC. Centers for Disease Control and Prevention 2011.
4. Stöckl H, Devries K, Rotstein A, Abrahams N, Campbell J, Watts C. et al. The global prevalence of intimate partner homicide: a systematic review. *The Lancet* 2013; 382(9895); 859–865.
5. Leonard KE. Alcohol and intimate partner violence: when can we say that heavy drinking is a contributing cause of violence? *Addiction* 2005; 100(4); 422–425.
6. Wilson IM, Graham K, Taft A. Alcohol interventions, alcohol policy and intimate partner violence: a systematic review. *BMC public health* 2014; 14(1); 881.
7. McKinney CM, Caetano R, Rodriguez LA, Okoro N. Does alcohol involvement increase the severity of intimate partner violence? *Alcoholism, Clinical and Experimental Research* 2010; 34(4); 655–658.
8. Slep AMS, Foran H, Heyman RE, Snarr JD. Unique risk and protective factors for IPV in a large scale survey of the US Air Force. *Journal of community health* 2010; 35(4); 375–383.
9. Stappenbeck CA, Fromme K. A longitudinal investigation of heavy drinking and physical dating violence among men and women. *Addictive behaviors* 2010; 35(5); 479 – 485.
10. Walton-Moss BJ, Manganello J, Frey V, Campbell JC. Risk factors for intimate partner violence and associated injury among urban women. *Journal of community health* 2005; 30(5); 377-389.
11. Klostermann K, Fals-Stewart W. Intimate partner violence and alcohol use: exploring the role of drinking in partner violence and its implications for intervention. *Aggression & Violent Behavior* 2006; 11(6); 587-597.
12. Tumwesigyea NM, Kasirye R, Nansubuga E. Is social interaction associated with alcohol consumption in Uganda? *Drug and alcohol dependence* 2009; 103(1); 9–15.
13. Graham K, Bernards S, Wilsnack S, Gmel, G. Alcohol may not cause partner violence but it seems to make it worse: A cross national comparison of the relationship between alcohol and severity of partner violence. *Journal of interpersonal violence* 2011; 26(8); 1503–1523.

14. Martin SL, Gibbs DA, Johnson RE, Sullivan K, Clinton-Sherrod M, Walters JL, Rentz ED. Substance use by soldiers who abuse their spouses. *Violence against women* 2010; 16(11); 1295–1310.
15. Giancola P, Levinson C, Corman M, Godlaski A, Morris D, Holt J, et al. Men and women, alcohol and aggression. *Experimental and clinical psychopharmacology* 2009; 17(3); 154-164.
16. White HR, Chen PH. Problem drinking and intimate partner violence. *Journal of Studies on Alcohol and Drugs* 2002; 63(2); 205–214.
17. Devries K, Mak J, Bacchus L, Child J, Falder G, Watts C, et al. Intimate partner violence and incident depressive symptoms and suicide attempts: a systematic review of longitudinal studies. *PLoS medicine* 2013; 10(5); e1001439.
18. Aldao A, Nolen-Hoeksema S, Schweizer S. Emotion-regulation strategies across psychopathology: A meta-analytic review. *Clinical psychology review* 2010; 30(2); 217-237.
19. Gratz KL, Roemer L. Multidimensional assessment of emotion regulation and dysregulation: Development, factor structure, and initial validation of the difficulties in emotion regulation scale. *Journal of Psychopathology and Behavioral Assessment* 2004; 26(1); 41-54.
20. Bushman B, Baumeister R, Phillips C. Do people aggress to improve their mood? Catharsis beliefs, affect regulation opportunity, and aggressive responding. *Journal of personality and social psychology* 2001; 81(1); 17-32.
21. McNulty JK, Hellmuth JC. Emotion regulation and intimate partner violence in newlyweds. *Journal of family psychology* 2008; 22(5); 794-797.
22. Stuart GL, Meehan JC, Moore TM, Morean M, Hellmuth J, Follansbee K. Examining a conceptual framework of intimate partner violence in men and women arrested for domestic violence. *Journal of Studies on Alcohol and Drugs* 2006; 67(1); 102–112.
23. Tager D, Good GE, Brammer S. Walking over 'em: An exploration of relations between emotion dysregulation, masculine norms and intimate partner abuse in a clinical sample of men. *Psychology of Men & Masculinity* 2010; 11(3); 233-239.
24. Garofalo C, Holden M, Velotti P, Ziegler-Hill V. Understanding the connection between self-esteem and aggression: The mediating role of emotion dysregulation. *Aggressive Behavior* 2015; in press.
25. Gratz K, Paulson A, Jakupcak M, Tull M. Exploring the relationship between childhood maltreatment and intimate partner abuse: Gender differences in the mediating role of emotion dysregulation. *Violence And Victims* 2009; 24(1); 68-82.
26. Shorey RC, Brasfield H, Febres J, Stuart GL. An Examination of the Association between Difficulties with Emotion Regulation and Dating Violence Perpetration. *Journal of aggression, maltreatment & trauma* 2011; 20(8); 870–885.

27. Langhinrichsen-Rohling J, Misra T, Selwyn C, Rohling M. Rates of bidirectional versus unidirectional intimate partner violence across samples, sexual orientations, and race/ethnicities: A comprehensive review. *Partner Abuse* 2012; 3(2); 199-230.
28. Magar ECE, Phillips LH, Hosie JA. Self-regulation and risk-taking. *Personality and individual differences* 2008; 45(2); 153-159.
29. Garofalo C, Velotti P. Alcohol misuse in psychiatric patients and nonclinical individuals: The role of emotion dysregulation and impulsivity. *Addiction Research & Theory* 2014; in press, doi: 10.3109/16066359.2014.987758
30. Tripp JC, McDevitt-Murphy ME. Emotion dysregulation facets as mediators of the relationship between PTSD and alcohol misuse. *Addictive Behaviors* 2015; 47; 55-60.
31. Fox H, Hong K, Sinha R. Difficulties in emotion regulation and impulse control in recently abstinent alcoholics compared with social drinkers. *Addictive Behaviors* 2008; 33(2); 388-394.
32. Stappenbeck CA, Fromme K. The Effects of Alcohol, Emotion Regulation, and Emotional Arousal on the Dating Aggression Intentions of Men and Women. *Psychology of addictive behaviors* 2014; 28(1); 10–19.
33. Veilleux JC, Skinner KD, Reese ED, Shaver JA. Negative affect intensity influences drinking to cope through facets of emotion dysregulation. *Personality and Individual Differences* 2014; 59; 96-101.
34. Costa D, Soares J, Lindert J, Hatzidimitriadou E, Sundin Ö, Barros H, et al. Intimate partner violence: a study in men and women from six European countries. *International journal of public health* 2015; 60(4); 467-478.
35. Johnson M, Ferraro K. Research on domestic violence in the 1990s: Making distinctions. *Journal of Marriage and family* 2000; 62(4); 948-963.
36. World Health Organization. *The ICD-10 classification of mental and behavioural disorders: clinical descriptions and diagnostic guidelines*. Geneva: World Health Organization 1992.
37. von Elm E, Altman DG, Egger M, Pocock SJ, Gøtzsche PC, Vandenbroucke JP; STROBE Initiative. The Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) statement: guidelines for reporting observational studies. *Epidemiology* 2007; 18(6); 800-4. PMID: 18049194
38. Schulz KF, Altman DG, Moher D. CONSORT 2010 Statement: updated guidelines for reporting parallel group randomised trials. *BMJ* 2010;340:c332.
39. Watkins LE, DiLillo D, Maldonado RC. The Interactive Effects of Emotion Regulation and Alcohol Intoxication on Lab-Based Intimate Partner Aggression. *Psychology Of addictive behaviors* 2015; doi: 10.1037/adb0000074.

40. Davison GC, Robins C, Johnson MK. Articulated thoughts during simulated situations: A paradigm for studying cognition in emotion and behavior. *Cognitive Therapy and Research* 1983; 7(1); 17-39.
41. Schumacher JA, Coffey SF, Leonard KE, O'Jile JR, Landy NC. Self-regulation, daily drinking, and partner violence in alcohol treatment-seeking men. *Experimental & Clinical Psychopharmacology* 2013; 21(1); 17-28.
42. Tharp AT, Schumacher JA, Samper RE, McLeish AC, Coffey SF. Relative Importance of Emotional Dysregulation, Hostility, and Impulsiveness in Predicting Intimate Partner Violence Perpetrated by Men in Alcohol Treatment. *Psychology Of Women Quarterly* 2013; 37(1); 51-60.
43. Leadley K, Clark C, Caetano R. Couples' drinking patterns, intimate partner violence, and alcohol-related partnership problems. *Journal of substance abuse* 2000; 11(3); 253-263.
44. Campbell JC. Health consequences of intimate partner violence. *Lancet* 2002; 359; 1331-1336.
45. Murphy CM, Winters J, O'Farrell TJ, Fals-Stewart W, Murphy M. Alcohol consumption and intimate partner violence by alcoholic men: Comparing violent and nonviolent conflicts. *Psychology of Addictive Behaviors* 2005; 19(1); 35-42.
46. Klostermann KC, Fals-Stewart W. Intimate partner violence and alcohol use: exploring the role of drinking in partner violence and its implications for intervention. *Aggression Violent Behav* 2006; 11(6); 587-97.
47. Murphy CM, O'Farrell TJ, Fals-Stewart W, Feehan M. Correlates of intimate partner violence among male alcoholic patients. *J Consult Clin Psychol* 2001; 69(3); 528-40.
48. Testa M, Quigley BM, Leonard KE. Does alcohol make a difference? Within-participants comparison of incidents of partner violence. *J Interpers Violence* 2003; 18(7); 735-43.
49. Thompson MP, Kingree JB. The roles of victim and perpetrator alcohol use in intimate partner violence outcomes. *J Interpers Violence* 2006; 21(2); 163-77.
50. Fonseca AM, Galduroz JC, Tondowski CS, Noto AR. Alcohol-related domestic violence: a household survey in Brazil. *Rev Saude Pública* 2009; 43; 743-749.
51. Reingle JM, Staras SA, Jennings WG, Branchini JB, Maldonado-Molina MM. The relationship between marijuana and intimate partner violence in a nationally representative, longitudinal sample. *J Interpers Violence* 2012; 27; 1562-1578.
52. Field CA, Caetano R, Nelson S. Alcohol and Violence Related Cognitive Risk Factors Associated With the Perpetration of Intimate Partner Violence. *Journal of Family Violence* 2004; 19(4); 249-253.

53. Testa M, Derrick JL. A daily process examination of the temporal association between alcohol use and verbal and physical aggression in community couples. *Psychology of Addictive Behaviors* 2014; 28; 127–138.
54. Velotti P, Balzarotti S, Tagliabue S, Zavattini GC, Gross J. Emotional Suppression in Early Marriage: Actor, Partner and Similarity Effects on Marital Quality. *Journal of Social and Personal Relationships* 2015; doi: 10.1177/0265407515574466.
55. Gross JJ, Joh, OP. Individual differences in two emotion regulation processes: Implications for affect, relationships, and well-being. *Journal of Personality and Social Psychology* 2003; 85; 348-362.
56. Bateman A, Bolton R, Fonagy P. Antisocial Personality Disorder: A Mentalizing Framework. *Personality Disorders* 2013; 11(2); 178-186.
57. Dimaggio G, Attinà G. Metacognitive Interpersonal Therapy for Narcissistic Personality Disorders with perfectionistic features: The case of Leonardo. *Journal of Clinical Psychology* 2012; 68; 922-934.
58. Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group. Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. *PLoS Med* 2009; 6(6); e1000097.