The Moderating Role of Trait Anger in the Relationship between Masculine Stress and Intimate Partner Violence

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Abstract
There is a high rate of intimate partner violence (IPV) in urban settings. Previous research has found that masculine gender role stress (MGRS) and anger predict IPV. This study aimed to examine the moderating role of anger on the relationship between MGRS and IPV. The sample included 366 urban male college students across Java, who completed an online questionnaire. Measures used were the MGRS-A, BPAQ, and CTS2. Using Hayes’ moderation analysis, the model obtained a significant fit ($R^2 = .1039$, $F (3,362) = 13.994$, $p = .000$). Both MGRS ($p = .0264$) and trait anger ($p = .000$) predicted IPV. The interaction between MGRS and anger was not significant ($p = .0797$). However, examination of the conditional effects revealed that there was a significant association between MGRS and IPV at moderate ($p = .0264$) and high levels of trait anger ($p = .0058$), but not at low levels of anger. Future studies should investigate the roles of anger expression, control behavior, and anger rumination.

Keywords
Anger, Dating Violence, Intimate Partner Violence, Masculinity, Masculine Gender Role Stress, Trait Anger

Following the Millennium Summit in 2000, all 191 member states of the United Nations (UN) committed to achieving the Millennium Development Goals (MDGs) by 2015 (United Nations, 2015). There were eight MDGs, one of which was “to promote gender equality and to promote women.” In 2016, this program was followed by the Sustainable Development Goals (SDGs; UN Development Program, 2016). There are 17 SDGs to be achieved in 15 years. SDG number five is “gender equality,” which the UN has defined as aiming to “Eliminate all forms of violence against all women and girls in public and private spheres, including trafficking and sexual and other types of exploitation.”

Although the UN states that the world made progress toward gender equality under the MDGs program, this goal does not seem to be progressing very well in Indonesia. Violence in a dating relationship is not yet protected by civil law in Indonesia. This means that it is very difficult for victims to sue the perpetrator through the legal process. The Indonesian National Commission on Violence Against Women reported that in 2017, there were 348,446 total cases of violence against women in Indonesia (Komnas Perempuan, 2018). It was found that 9,609 cases occurred in a domestic or intimate relationship setting, of which there were several categories: 41% physical violence, 31% sexual violence, 15% psychological violence, and 13% economic violence. The majority of violence in a domestic setting happened to married women...
(5,167 cases), followed by female children (2,227 cases), and lastly dating violence (1,873 cases). In this research, we focus on dating violence, which refers to intimate partner violence (IPV) in a dating relationship. In 2018, dating violence increased to 2,073 cases (Komnas Perempuan, 2019). Dating violence, specifically physical violence, is a common phenomenon in teen dating relationships (Jouriles, Mcdonald, Mueller, & Grynch, 2011). Internationally, studies show that 27.1% (Desmarais, Reeves, Nicholls, Telford, & Fiebert, 2012a) to 29% (Straus, 2004) of college students who were a victim of IPV in a dating relationship. The data were collected from 8,666 male and female college students at 31 universities in 16 countries.

Research has shown that IPV might be life-course specific for emerging adults aged 18 to 25 years (Giordano, Copp, Longmore, & Manning, 2016). When individuals experience psychological violence/abuse within a romantic relationship (either as a victim or a perpetrator) during emerging adulthood, they are more likely to re-experience the event during adulthood (Lohman, Neppl, Senia, & Schofield, 2013). Romantic relationships in emerging adulthood tend to last longer than those in adolescence, and there is more potential for emotional, physical, and sexual intimacy (Arnett, 2000). There have been conflicting findings on gender differences in IPV perpetration. Some studies reported that men were more likely than women to perpetrate both physical and verbal IPV (Buss & Perry, 1992; Gass, Stein, Williams, & Sedaat, 2011). Moreover, there was a higher number of women reported as IPV victims than that of men (Breiding, Ziembroski, & Black, 2009). However, other studies found higher rates of IPV perpetration in women than in men (Allen, Swan, & Raghavan, 2009; Desmarais, Reeves, Nicholls, Telford, & Fiebert, 2012b), or equal rates of IPV perpetration in both men and women (Straus, 2004). Although there has been a long-standing debate about gender symmetry or asymmetry in patterns of IPV perpetration, researchers agree that male-perpetrated violence is more likely to result in injuries, compared with female-perpetrated violence (Allen et al., 2009; Kaukiinen, 2014). The most severe consequences of IPV is intimate partner homicide. It constitutes more than a quarter (26%) of homicide in Denmark (Leth, 2009). In addition, a systematic review from 66 countries suggested that 13.5% of homicides were committed by the victim’s intimate partner (Stöckl et al., 2013).

Rates of dating violence are high in urban settings (Jain, Buka, Subramaniam, & Molnar, 2010; Martin, Houston, Mmari, & Decker, 2012; Reed, Silverman, Raj, Decker, & Miller, 2011). A review of the literature (Edwards, 2015) found that the rates of IPV in rural, suburban, and urban areas are generally similar. However, Strand and Storey (2019) found that the prevalence of IPV is higher in urban areas compared with that in rural and remote areas and that urban areas have higher moderate-severity violence than rural areas (e.g., single instance assault or sexual assault). According to The World Bank (2019a), approximately more than half of the Indonesian population (around 151 million people) are living in cities and towns. Thus, it is critical that IPV is studied in urban cities in Indonesia.

**Masculine Stress**

The high rate of IPV against women in Indonesia can be attributed to the long-standing patriarchal system. The patriarchy in Indonesia has a powerful influence over society’s values, beliefs, and structural system (Rachmah, 2001; Wibawa & Windyaningsih, 2011). This patriarchal system determines distinct social roles for men and women, often called gender roles. Gender roles reflect society’s norms and expectations about how men and women should behave (Helgeson, 2012). Any characteristic or behavior that men should display is called masculinity. Likewise, any characteristic or behavior that women should display is called femininity. According to the gender role strain paradigm, the characteristics of masculinity can have positive and negative effects. A strong masculine character may correlate with sexual aggression, low self-disclosure, dominance (negative), or breadwinning responsibility (positive) (Pleck, Sonenstein, & Ku, 1993).

However, there are situations when men fail to meet the expectations of society. Failure to adhere to hegemonic masculine norms may cause crucial problems (Mcdermott & Lopez, 2013). Men may experience stress when they judge themselves as being unable to comply or cope with masculine gender roles, or when they are viewed by others as unmanly or even femi-
nine (Eisler & Skidmore, 1987; Levant & Powell, 2017). This situation is called masculine gender role stress (MGRS). This distress in men is correlated with higher states of anger, increased anxiety, hostility, and aggressive behavior (Fleming, Gruskin, Rojo, & Dworkin, 2015; O’Neil & Crasper, 2011), which can lead to adverse social and psychological outcomes (Hasyim, Kurniawan, & Hayati, 2011). For example, they may consume alcohol or drugs, lie to maintain their self-esteem, and perform violent and other negative behaviors. Men often try to overconform to society’s expectations (Pleck, 1981), which can lead to aggressive behavior as a means of maintaining their dominance and control (Eisler, Franchina, Moore, Honeycutt, & Rhatigan, 2000). It has been found that men who fail to conform to gender role expectations are more likely to use physical violence, but not sexual violence, in a dating relationship (Reidy, Berke, Gentile, & Zeichner, 2014; Reidy, Smith-Darden, Cortina, Kernsmith, & Kernsmith, 2015).

A meta-analysis of 20 studies supports the theory that MGRS is a significant predictor of IPV (Baugher & Gazmararian, 2015). Further studies have also found that MGRS was positively correlated with the perpetration of intimate partner physical aggression (Lisco, Leone, Gallagher, & Parrott, 2015) and violence in dating relationships (Jakupcak, Lisak, & Roemer, 2002). The studies indicate that men with higher masculine gender role stress were likely to perpetrate an IPV. McDermott and Lopez (2013) also found that MGRS predicts attitudinal acceptance of IPV. However, studies of MGRS are still scarce in Indonesia (e.g., Sabrina, Ratnawati, & Setyowati, 2016; Wong, Tsai, Liu, Zhu, & Wei, 2014).

Hypothesis

Previous studies have established that high MGRS predicts intimate partner violence and that trait anger plays a significant role in the perpetration of violence. This study aims to test the effects of MGRS and trait anger in predicting IPV in a dating relationship. We hypothesize that both MGRS and trait anger positively predict IPV. Furthermore, we hypothesize that trait anger moderates the association between MGRS and IPV, such that the high levels of masculine gender role stress will increase IPV perpetration in men with high levels of trait anger than in men with low levels of trait anger.

Method

Participants

Using a non-probability sampling method, this cross-sectional study recruited 370 participants from multiple universities in urban cities in Java Island, Indonesia. Participants were male undergraduate students, considered emerging adults (18 to 25 years old), and currently involved in a heterosexual relationship for at least one year. We excluded four participants because they had outlier scores on the MGRS-A and BPAQ measures. We did not exclude participants with
outlier scores on the CTS2 measure (IPV perpetration), because this research is focused on perpetration, and we will lose a lot of data and information if we cut those participants from the analysis. Thus, there were 366 participants included in the final analysis. The average age of the sample was 21.66 years old (SD = 1.642), ranging from 18 to 25 years old. Participants’ relationships varied in duration: 40.2% had been in the same relationship for 12 to 23 months, 37.4% for 24 to 47 months, and 22.4% for more than 48 months. This study was approved by the ethics committee of the Faculty of Psychology at Universitas Indonesia.

**Measures**

There were three instruments used in this study. They were the Revised Conflict Tactic Scale (CTS2), Buss-Perry Aggression Questionnaire (BPAQ), and Abbreviated-Masculine Gender Role Stress (MGRS-A).

**Conflict Tactic Scale - 2 (CTS2).** The CTS2 is a self-report inventory that measures the frequency of violence that happened during the last year, both as a victim and as a perpetrator (Straus, Hamby, Boney-McCoy, & Sugarman, 1996). The original measure consisted of 39 pairs of questions, across 4 subscales: physical assault, psychological aggression, sexual coercion, and negotiation. The present study used the latest version adapted and translated to Indonesian (Aryani, 2013). This version includes 23 pairs of questions: 23 items measuring perpetration of violence and 23 items measuring experience as a victim of violence. The Indonesian version of the CTS2 consists of three subscales: physical assault (7 items; score ranged from 0 to 28), psychological aggression (13 items; score ranged from 0 to 52), and sexual coercion (3 items; score ranged from 0 to 12). Items from the original negotiation subscale are included in the psychological aggression subscale. Each statement is rated on a five-point Likert scale: 0 = “Never -0 times in past year,” 1 = “Rarely -1 to 5 times in the past year,” 2 = “Sometimes -6 to 10 times in the past year,” 3 = “Often -11 to 20 times in the past year,” and 4 = “Very Often -more than 20 times in the past year.”

The present study used only the 23 questions that measure the perpetration of violence, since that was the outcome of interest. Therefore, the participants’ scores on the CTS2 can range from 0 to 92. We tested the reliability of this measure for the purpose of this study (Cronbach’s $\alpha = .707$). Several items were also revised after the face validity process.

**Buss-Perry Aggression Questionnaire (BPAQ).** The BPAQ was developed by Buss and Perry (1992) to measure aggression. It has four subscales: physical aggression (nine items), verbal aggression (five items), anger (seven items), and hostility (eight items). The BPAQ has been translated and adapted to the Indonesian language by Sharaswaty (2009). In the present study, we used only the seven items of the anger subscale. Each item is rated on a six-point Likert scale, from 1 = “Extremely uncharacteristic of me” to 6 = “Extremely characteristic of me.” The range of scores on the anger subscale is 7 to 42. Thus, higher scores indicate higher trait of anger. Sharaswaty (2009) found the BPAQ to have a high level of reliability (Cronbach’s $\alpha = .934$).

**Abbreviated-Masculine Gender Role Stress (MGRS-A).** The MGRS-A was developed by Swartout, Parrott, Cohn, Hagman, and Gallagher (2015). It is a shortened version of the Masculine Gender Role Stress Scale, which was originally developed by Eisler and Skidmore (1987). The purpose of this instrument is to measure MGRS among men. It is a self-report questionnaire, with 15 items that are each rated on a six-point Likert scale, ranging from 1 = “Not stressful” to 6 = “Extremely stressful.” The range of possible scores is 15 to 90. Higher scores indicate higher MGRS. We tested the reliability coefficient of the MGRS-A was sufficient (Cronbach’s $\alpha = .877$).

**Procedure**

The MGRS-A had not been previously adapted for Indonesian-speaking participants. Therefore, we undertook a back-translation process on this measure. We conducted a face validity test by asking two experts in gender and clinical psychology from Universitas Indonesia. We also asked 10 male college students to review the readability of the instruments. After that, 33 male college students, who met the study criteria, completed the CTS2 and MGRS-A question-
Table 1. Correlation among variables, means, and standard deviations

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>M</th>
<th>SD</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>MGRS-A</td>
<td>.187**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>55.2</td>
<td>13.41</td>
</tr>
<tr>
<td>2</td>
<td>BPAQ Anger</td>
<td></td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td>22.06</td>
<td>7.371</td>
</tr>
<tr>
<td>3</td>
<td>CTS2 Total</td>
<td>.160**</td>
<td>.291**</td>
<td></td>
<td></td>
<td></td>
<td>13.48</td>
<td>7.368</td>
</tr>
<tr>
<td>4</td>
<td>CTS2 Phys</td>
<td>.144**</td>
<td>.261**</td>
<td>.900**</td>
<td></td>
<td></td>
<td>0.96</td>
<td>2.11</td>
</tr>
<tr>
<td>5</td>
<td>CTS2 Psych</td>
<td>.105*</td>
<td>.180**</td>
<td>.647**</td>
<td>.332**</td>
<td></td>
<td>11.3</td>
<td>5.603</td>
</tr>
<tr>
<td>6</td>
<td>CTS2 Sexual</td>
<td>0.079</td>
<td>.161**</td>
<td>.504**</td>
<td>.168**</td>
<td>.420**</td>
<td>1.21</td>
<td>1.872</td>
</tr>
</tbody>
</table>

Note. MGRS-A = Abbreviated-Masculine Gender Role Stress; BPAQ Anger = Buss–Perry Aggression Questionnaire - Anger; CTS2 Total = Conflict Tactic Scale 2 Total Score; CTS2 Phys = Conflict Tactic Scale 2 Physical Score; CTS2 Psych = Conflict Tactic Scale 2 Psychological Score; CTS2 Sexual = Conflict Tactic Scale 2 Sexual. ** p < .01, * p < .05.

Results

We measured the mean and standard deviation (SD) for each variable and sub-variable, as reported in Table 1. Mean of physical perpetration (M = 0.96, SD = 2.11; maximum score = 28) and sexual perpetration (M = 1.21, SD = 1.872; maximum score = 12) were extremely low, psychological perpetration (M = 11.3, SD = 5.603; maximum score = 52) was highest. Next, correlation analysis revealed that almost all variables positively correlated with each other (p < .01).

MGRS-A and CTS2 (psychological perpetration) correlated significantly together (p < .05; r = .105). Only MGRS-A and CTS2 (sexual perpetration) did not show a significant correlation with each other (r = .079, p > .05).

The moderation analysis revealed that the model fit significantly (R² = .1039, F (3,362) = 13.994, p = .000). Table 2 shows that both MGRS (B = .0629, p = .0264) and trait anger (B = .2620, p = .000) were significant predictors of IPV in dating relationship. Both variables positively predict IPV, meaning that high level of MGRS and trait anger predict high level of IPV. However, the interaction between MGRS and anger was not significant (B = .0063, p = .0797). Furthermore, as shown in table 3 and in Figure 1, there was a significant association between MGRS and IPV at moderate (B = .0629, t (362) = 2.2289, p = .0264) and high levels of trait anger (B = .1095, t (362) = 2.7729, p = .0058), but not at low levels of trait anger.

Table 2. Moderation model analyses

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B</th>
<th>p</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGRS-A</td>
<td>0.0629</td>
<td>0.0264</td>
<td>0.0074</td>
</tr>
<tr>
<td>BPAQ Anger</td>
<td>0.262</td>
<td>0.0000</td>
<td>0.1627</td>
</tr>
<tr>
<td>MGRS-A x BPAQ Anger</td>
<td>0.0063</td>
<td>0.0797</td>
<td>-0.0008</td>
</tr>
</tbody>
</table>

Note. MGRS-A = Abbreviated-Masculine Gender Role Stress; BPAQ Anger = Buss–Perry Aggression Questionnaire - Anger; MGRS-A x BPAQ Anger = Interaction.
Discussion

In this study, we examined the role of trait anger in moderating the relationship between MGRS and the perpetration of IPV among male college students in Indonesia. Firstly, analysis of the main effects revealed that MGRS and trait anger positively predicted the perpetration of IPV in a dating relationship. Secondly, there was evidence for a moderating effect of anger on MGRS. It was found that MGRS did positively predict IPV, but only when trait anger was at a moderate or high level. The main effects of MGRS and anger are in line with those in previous research (Baugher & Gazmararian, 2015; Jakupcak et al., 2002). However, our hypothesis of the interaction between MGRS and trait anger in predicting IPV was not supported and was only marginally significant. This is quite different from previous findings (Cohn et al., 2009) and arguments (Baugher & Gazmararian, 2015).

In regard to our finding that MGRS did not predict IPV at low levels of anger, we believe that this is an expected result. Research shows that anger has a significant influence on IPV (Giordano et al., 2016; Taft et al., 2010). Thus, it is reasonable to expect that when anger is low, it does not have a moderating effect. These results only show that anger has an important role in explaining IPV perpetration. Regardless of the level of MGRS, the likelihood that an individual will perpetrate IPV is dependent on his or her level of anger. In other words, if an individual has a moderate to a high level of anger, he or she will be more likely to perpetrate IPV. This result suggests that anger management should be emphasized in the clinical treatment of individuals who perpetrate IPV.

Our findings showed a relatively high mean score of MGRS among participants, which is in contrast to Jankowiak and Li’s (2014) findings in China. Jankowiak and Li argue that economic development, particularly in an urban city, provides increased opportunities for men and women to work, to develop themselves, and to have an adventure. They claim that, compared with

<table>
<thead>
<tr>
<th>Trait Anger</th>
<th>B</th>
<th>p</th>
<th>95% CI</th>
</tr>
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<tbody>
<tr>
<td>One SD Below Mean</td>
<td>0.0163</td>
<td>0.6689</td>
<td>-0.0584</td>
</tr>
<tr>
<td>At The Mean</td>
<td>0.0629</td>
<td>0.0264</td>
<td>0.0074</td>
</tr>
<tr>
<td>One SD Above Mean</td>
<td>0.1095</td>
<td>0.0058</td>
<td>0.0319</td>
</tr>
</tbody>
</table>

Figure 1. Effect of trait anger on the relationship between MGRS and IPV
the early 1980s, masculine and feminine gender roles have become less well defined among urban Chinese. For example, in the 2000s, both men and women believed that “intelligence” and “confidence” are not exclusively masculine attributes. Nowadays, men and women believe that traits are gender irrelevant. Interestingly, even though Indonesia is in a state of economic development (The World Bank, 2019b) and its citizens have a lot of employment opportunities, similar to China, Indonesian men still believe in traditional gender beliefs. This phenomenon might be explained by the patriarchal system that has been strongly rooted in Indonesia (Rachmah, 2001; Wibawa & Windyaningsih, 2011).

The low level of IPV perpetration might also be influenced by the types of emotional experience that Indonesians are culturally allowed to express. Each culture has a set of rules that define what and how emotions are allowed to be expressed, called cultural display rules (Matsumoto & Juang, 2007). Indonesian people, belonging to a collectivist society, might suppress their expression of negative emotion (i.e., anger) toward other people, because they believe it might endanger their relationship with the target of their anger. Malay culture (i.e., Indonesia) also has an ideal form of expressing negative emotions, which is to suppress it and to behave according to formal etiquette (Browne, 2001). Individuals who share this belief might be more likely to suppress their aggressive urges, so it will not be expressed in a blunt manner.

Next, the frequency and severity of IPV are dependent on the perpetrator’s control of his or her romantic partner (Follingstad, Bradley, Helff, & Laughlin, 2002; Giordano et al., 2016). Controlling a partner’s behavior in a romantic relationship (e.g., monitoring and checking, deciding partner’s appearance, monopolizing partner’s time and preferences) is a mediator between anger and IPV (Follingstad et al., 2002). Therefore, a person who has a high level of anger temperament will be less likely to engage in IPV if they are not also attempting to control their partner. This model also shows that IPV begins with controlling behavior and gives us insight into when people start to engage in IPV.

In the present study, we only measured MGRS, trait anger, and the level of IPV perpetration. There might be other factors that influence the relationship between these variables. One possible factor is assertiveness. Spielberger and Reheiser (2009) argue that an individual’s assertiveness skills can help them to facilitate a constructive solution in a frustrating situation. Consequently, when they are in a conflictual situation and experience a negative emotion (i.e., anger), they can manage the anger so that it does not result in violent behavior. These assertiveness skills should be included in anger management intervention for IPV treatment. Another possible factor is the type of anger that the participants have. According to Spielberger and Reheiser (2003), there are several types of anger expression: Anger-Out, Anger-In, Anger-Control Out, and Anger-Control In. The type of anger expression that is most relevant to the perpetration of violence is Anger-Out. Individuals who experience only the other three types of anger are likely to express it with non-violent behavior.

A final factor that might influence the expression of anger in the context of IPV is anger rumination (Ruddel, Pina, & Vasquez, 2017). Ruddel et al. (2017) believe that aggressive behavior can be provoked through angry rumination in adulthood (Ruddel et al., 2017). Researchers have also noted that men are more likely to engage in anger rumination than women are (Nolen-Hoeksema, 2012). Considering its potential role in exacerbating the perpetration of IPV in the context of daily hassles and traumatic experiences, anger rumination might be another important factor to assess. This factor might interfere with the associations among variables in our hypothesized model, or it might play a role as an extraneous variable.

Strength and Limitation

This study included a wide and extensive sample across Java, including male college students in several urban cities, such as Jakarta, Bandung, Yogyakarta, Semarang, and Surabaya. This research contributes to a better understanding of dating violence in urban cities in Java. However, there are several limitations to this study. First, as mentioned above, the participants of this research were college students and are not representative of the wider population. Secondly, the sample included only male college students.
Therefore, it is difficult to generalize the results to other male populations.

We did not gather data from clinical or forensic samples. Thus, we found that the level of IPV perpetration was relatively low. Different findings might be found if the model is tested with samples taken from clinical or forensic settings, such as prisons, police departments, and NGOs. To better understand the relationship between MGRS, anger, and IPV, we suggest further research in those settings. This also influenced our decision to exclude outlier scores from the analysis. Consequently, the average score for each type of IPV perpetration became extremely low.

Another limitation to the present study is that it did not capture participants’ experience of victimization in their relationships. A previous study has shown that dating violence is perpetrated by both males and females (Harned, 2002). A recent review of the literature showed that 59.6% of IPV reported across various samples (population, school, community, and clinical samples) could be categorized as bidirectional (Langhinrichsen-rohling, Misra, Selwyn, & Rohling, 2012). It is necessary for future research to take male’s experience of violence into account, as it would enrich our understanding of the dynamic of IPV in a dating relationship.

Conclusion

This study hypothesized that trait anger significantly moderates the relationship between MGRS and IPV. The results revealed that the proposed model fit significantly. Both MGRS and anger directly predicted IPV. However, the interaction was not significant. In the exploration of the conditional effects, MGRS was a positive predictor of IPV only when trait anger was moderate or high. This finding demonstrates the important role of trait anger in IPV perpetration. It also suggests that, in order to reduce IPV perpetration, a treatment that emphasizes anger management intervention is needed. There are several factors that need to be considered in future research, such as cultural expressions of anger, control behavior, and anger rumination.

Declaration of Conflicting Interest

There is no conflicting interest in the authorship and/or the publication of the manuscript.

Funding

The authors received no financial support for this research. It was independently provided by the authors.

References


Health, 56(6), 619-624. https://doi.org/10.1016/j.jadohealth.2015.02.009


