Psicothema

Psicothema 2021, Vol. 33, No. 2, 206-213 doi: 10.7334/psicothema2020.275 ISSN 0214 - 9915 CODEN PSOTEG Copyright © 2021 Psicothema www.psicothema.com

# Masculine Gender Role Stress as a Mediator of the Relationship Between Justification of Dominance and Aggression and Male Adolescent Dating Violence Against Women

Emma Merino, María José Díaz-Aguado, Laia Falcón, and Rosario Martínez-Arias Universidad Complutense de Madrid

## Abstract

Background: This research explores the role of masculine gender role stress (MGRS) in male adolescent dating violence (MADV). Previous research has found that progress towards gender equality between men and women is in certain contexts related to the greater prevalence of male intimate partner violence against women. These studies of adult men found that masculine gender role stress could help explain this surprising result. Method: The incidental sample of this study consisted of 339 boys residing in Madrid, Spain, aged 13 to 16. MGRS was assessed by two factors from the Eisler & Skidmore scale (1987): subordination to women (SW) and intellectual inferiority (II). MADV against women was assessed according to two subscales of the Revised Conflict Tactics Scale, CTS2: psychological aggression and physical aggression. Results Show for the first time in adolescents that MGRS caused by situations of subordination to women is an important MADV risk factor both in terms of physical and psychological violence. Our study also found that MGRS mediates the relationship between MADV against women and the justification of intimate partner violence against women (JIPVW). Conclusions: This article discusses the implications of these results for the prevention of MADV against women.

*Keywords:* Adolescent male, dating violence against women, masculine gender role stress, justification of intimate partner violence against women, self-esteem.

## Resumen

El Estrés de Rol de Género Masculino Como Mediador Entre la Justificación del Dominio y la Agresión y la Violencia de Género de los Chicos Adolescentes. Antecedentes: el avance hacia la igualdad entre hombres y mujeres se relaciona en determinados contextos con una mayor prevalencia de violencia de género. Los estudios con adultos habían encontrado que el estrés de rol de género masculino (SRGM) podría ayudar a explicarlo. Este estudio explora el papel del SRGM en la violencia de género de los chicos adolescentes (VGA). Método: se basa en una muestra incidental de 339 chicos, de 13-16 años. El SRGM se evalúa a través de los factores de subordinación a la mujer (SM) e inferioridad intelectual de la escala de Eisler & Skidmore (1987). La VGA se evalúa a través de los factores de agresión psicológica y agresión física de la escala Revised Conflict Tactics CTS2. Resultados: se encuentra, por primera vez en adolescentes, que el factor subordinación a la mujer del SRGM es una importante condición de riesgo de la VGA, tanto para la agresión física como para la psicológica, y que el SRGM media en la relación entre VGA y la justificación de dicha violencia. Conclusiones: a partir de estos resultados se proponen pautas para la prevención de la violencia de género y la construcción de la igualdad.

*Palabras clave:* violencia de género, adolescencia, estrés de rol de género, justificación de la violencia de género, autoestima.

As the World Health Organization (WHO) recognizes (Krug et al., 2002), intimate partner violence against women (IPVAW) is a serious problem which occurs in all countries, cultures and social classes and which manifests in several forms: physical aggression, psychological abuse, sexual coercion, domination and abusive control. A review of 185 studies carried out in 86 countries (WHO, 2013) shows that 30% of women in an intimate partnership have suffered physical and/or sexual violence worldwide, and this figure is practically reached by the age of 15 to 19, at 29.4%.

This result emphasizes the urgency of studying and preventing adolescent dating violence against women (ADVAW). The review also revealed significant differences between countries that could be related to the unequal distribution of power between men and women, the main risk condition to which IPVAW is attributed (WHO, 2013).

The ecological approach of gendered violence adopted in this investigation can provide a good framework to explain how individual characteristics that increase the risk of ADVAW may interact with the contextual characteristics at different levels. The analysis of such violence carried out from this perspective considers characteristics from: 1) individuals; 2) interpersonal relationships or micro-system; 3) the community or mesosystem; and 4) society or macro-system (Krug et al., 2002; Stith et al., 2004). As the ecological approach of human development proposal by Bronfenbrenner (1979) recognizes, the influence of

Received: July 27, 2020 • Accepted: November 23, 2020 Corresponding author: María José Díaz-Aguado Facultad de Psicología Universidad Complutense de Madrid 28006 Madrid (Spain) e-mail: mjdiazag@ucm.es

playing a social role (such as the role of traditional masculinity in dating) occurs at different levels, including at the individual and micro-system levels, with the interpersonal relationships that occur therein, but also in the community and the macro-system levels in which the role has its roots. The meta-analysis review by Puente-Martínez et al. (2016) based on the socio-ecological model indicates that the IPVAW risk conditions in the macro-system in relation to the lack of empowerment of women on the lower levels of society are: economic and educational underdevelopment, lack of social and political rights, and diminished female autonomy and state democratization. They also found that IPVAW increases where there is collective violence (wars, both past and present), and in masculine and honor cultures, in which the violence is normative and instrumental. These findings match the correlations between justification of violence, traditional attitudes towards gender roles and the perpetration of acts of violence and, on a community level, where exposure to violence from infancy increases the risk of exercising it in later life, including male adolescent dating violence against women (MADVAW).

Contrary to what has been observed at world level (WHO, 2013; Puente et al., 2016), the study by the European Union Agency for Fundamental Rights (FRA, 2014), carried out with 42,000 women of the 28 EU member states, found a positive correlation between levels of equality between men and women of a country and incidence of IPVAW. In other words, on the macro-social level in Europe, when a country reduces the equality gap, the risk of IPVAW increases. One possible explanation for this surprising finding, among other causes, could be that women's access to situations from which they were previously excluded could raise the risk of violence against them (FRA, 2014). To clarify this explanation, and to help offset this risk, it is necessary to discover how men experience the progress made by women towards equality with men, the situations in which men have to subordinate themselves to women, and the resistance to change that this progress seems to arouse in those who identify with the traditional male mindset. The urgency to study male resistance to change is increasingly emphasized by gendered violence researchers, who insist on the importance of raising men's awareness of the advantages that this construction could confer on them (Santoro et al., 2018). As an indication of men's resistance to change, the results of studies on ADVAW in Spain show that boys identify with sexist behavior and justify violence far more than girls (De la Osa Escudero et al., 2015; Díaz-Aguado et al., 2011, 2014; Martínez-Dorado et al., 2020; Ubillos-Landa et al., 2017).

To understand the characteristics of European research into gender violence, Bradbury-Jones et al., (2019) undertook a review of articles published in 2015 in the 13 highest-impact specialist journals on abuse and violence. Of the 32 articles found, the majority investigated victimization and survivorship among women and girls. Only 7 studied the perpetration of violence by men and boys, in which the characteristics most widely analyzed were discourses of violence, ranging from challenging gender inequality to supporting patriarchy and male dominance, and the tendency to reproduce the violence experienced in the family of origin. An interesting phenomenon that they encountered was the "hidden" nature of gender-based violence within many articles. The authors concluded that the gender perspective needed to be better explained, and noted that most research on both men and women in this context considered IPV to be symmetric, an approach that has been criticized as "gender-blind" (Anderson, 2005; FerrerPérez, & Bosch-Fiol, 2019) as it ignores the decisive role that this variable plays in IPVAW.

As the Bradbury-Jones et al. (2019) review shows, the majority of research on ADVAW in other cultural contexts on the risk conditions for boys who inflict violence finds that they adhere to gender stereotypes that accept male dominance and ADVAW (Reyes et al., 2016; Shen et al., 2012; Wesche & Dickson-Gómez, 2019). Results from research on adolescents in Spain based on broad samples also reflect this finding (Díaz-Aguado et al., 2011, 2014; Díaz-Aguado & Martínez Arias, 2015), in which the risk of MADVAW increases with the presence of sexist attitudes and justification of violence.

The prevalence of MADVAW increased between 2010 and 2013 in Spain, a conclusion drawn from the evaluations of situations of abuse that girls acknowledge having suffered, and from statements from boys who recognize having inflicted that violence (Díaz-Aguado et al., 2014). The results from this study suggest that this increase is due to the growing use of new communication technologies and their application in situations of MADV. It is important to understand that this rise in MADVAW in Spain is found among cohorts who enjoy a level of education that is more equal than previous times, and is inflicted on girls living through an era of spectacular successes in breaching traditional sexist exclusions. This advance is particularly visible in education, which has seen a turnaround in the traditional differences between genders, since it is girls who now figure more prominently in all the positive and negative educational indicators, with the exact opposite applying to boys. As an example of these differences, the premature school drop-out rate is 14% for girls and 21.7% for boys (INE, 2018).

In Spain, the fact that boys who inflict MADVAW have lower levels of self-esteem than boys who do not, emphasizes the importance of the emotional component of ADVAW, which can be activated when boys interact with girls of higher educational achievement than them, for example in the school microcosm (Díaz-Aguado et al., 2011, 2014; Díaz-Aguado & Martínez, 2015). Research in other cultural contexts to predict IPVAW directly through self-esteem have provided conflicting results (Cowen & Mills, 2004; Foshee et al., 2001; Smith et al., 2018), showing that this link can vary with age and cultural context. From a perspective that the gender approach shares with feminism, but which centers on what happens in men, Pleck's gender role strain paradigm (1995) provides a good explanation of the emotional problems caused by difficulties in living up to gender stereotypes. This theory posits that actual or imagined violation of gender roles leads people to overconform to them. Some male gender role traits -status, toughness, and antifemininity- are frequently dysfunctional for those who identify with them, leading to significant limitations to their psychological development and well-being. From this paradigm, it is easy to see that historic changes in the differences between men and women can generate serious gender role stress (Levant, 2011; Pleck, 1995). The fact that IPVAW rises when a woman has a higher level of education than the man with whom she shares a relationship (Ackerson et al., 2008; Chan, 2009) could also be related to male gender role strain. In these situations, the man would inflict IPV against the woman as a way of exercising a dominance that he might feel to be under threat (Levant, 2011; Gallagher & Parrot, 2011).

The instrument most commonly used for measuring the strain felt by men that originates in sexist stereotypes is the Masculine Gender Role Stress (MGRS) scale designed by Eisler & Skidmore (1987), which includes five factors: physical inadequacy, emotional inexpressiveness, subordination to women, intellectual inferiority and performance failure. Theoretically, the subordination construct (stress associated to being outperformed by women) could lead to more serious outbreaks of violent behaviour because subordination to women is one of the main threats to traditional gender roles that ascribe authority to males (Baugher & Gazmararian, 2015).

Nearly all MGRS studies have been carried on adults, and show that MGRS is more a direct predictor of IPVAW than adherence to specific norms of masculine ideologies (Jakupcak et al., 2002). Research on male adults has found that endorsement of hegemonic masculine gender role beliefs only predicted aggression against women among men who also reported high levels of masculine gender role stress (Gallaher & Parrot, 2011; Jakupcak et al., 2002).

Two studies on other emotional components of sexism (discrepancy strain) have indicated their importance in MADVAW. The study in Michigan (USA) using a self-reporting questionnaire designed by the researchers (Reidy et al., 2015) found that the boys with high discrepancy strain were more liable to perpetrate acts of general sexual violence but not dating violence. Surprisingly, boys in the sixth grade cohort perpetrated dating and sexual violence at rates equivalent to boys in the ninth grade cohort. In the second investigation (Reidy et al., 2018) into adolescents with a mean age of 13, it was found that gender role discrepancy was protective against psychosocial maladjustment after the variance of male discrepancy stress was controlled. These findings point to a need to begin prevention efforts at an early age before adolescence begins, and to incorporate strategies to reduce gender role discrepancy stress.

We have found only one investigation of adolescents that measures masculine gender role stress using the MGRS scale (Merino, 2018), which is the most frequently used for male adults. This study measured the reliability and validity of two factors on this scale for adolescents, subordination to women and intellectual inferiority; the findings revealed that boys with higher levels of MGRS for these two factors recognized that they perpetrated more MADVAW than boys with less MGRS.

The objective of this study was to understand how to prevent MADVAW by analysing the role of two variables that may act as risks. We specifically examined the effect on MADVAW of: 1) justification of intimate partner violence against women (JIPVW), (hypothesis one); 2) masculine gender role stress (MGRS), (hypothesis two; 3) and the mediating role of MGRS on the association between MADVAW and JIPVW, (hypothesis three).

Following prior research, we hypothesized that:

H1. An increase in justification of intimate partner violence against women (JIPVW) is associated with an increase in male adolescent dating violence (MADVAW).

H2. An increase in masculine gender role stress is associated with an increase in MADVAW.

H3. Masculine gender role stress mediates the relationship between JIPVW and MADVAW.

#### Method

#### Participants

This research was carried out in a medium-sized city in the south of Madrid (Spain), with a population of around 169000 inhabitants.

The incidental sample consisted of 339 adolescent males at five secondary schools corresponding to three educational center types. 43.6% attended two state-subsidized Catholic schools; 33.3% attended two state schools, and 23.6% a private secular school. The students at the private school center were mainly of middle-class background, and the students at the other four schools were of middle- and lower-middle class origin. Participants were in the third (59%) and fourth (41%) grades of compulsory secondary education, aged 13 to 16 (M = 14.8, SD = .88).

#### Instruments

The following instruments were used to measure the variables studied:

Male adolescent dating violence (MADV) against women. This was evaluated using the Revised Conflict Tactics Scale, CTS2 (Strauss et al., 1996). This scale was chosen as it is the one most widely used internationally to measure intimate partner violence, including studies on the relationship between IPV and MGRS. The scale has been validated with adolescents in different cultural contexts (Exner-Cortens et al., 2016). The Spanish translation of the scale adopted was one that included items used in validation with adolescents in Spain (Muñoz-Rivas et al., 2007). Two of that scale's five subscales were used to measure the frequency of behaviours of MADV against women. Three items were discarded that did not fit the age of the participants: 2 on psychological aggression ("accused partner to being a lousy lover" and "stomped out of the room") and 1 item on physical aggression ("used knife or gun on partner"). The responses were scored on a scale of 0 to 4, with 0 meaning Never, and 4, Very Often. With the data from the sample, the value of the coefficient alpha for the psychological abuse scale was 0.89, and 0.98 for the physical aggression scale.

Justification of male intimate partner violence against women (JMIPVW). This was measured by one of the two factors in the questionnaire for Justification of violence and male dominance (Díaz-Aguado & Martínez, 2015) consisting of seven items with the main distortions detected in recent decades regarding violence against women (Bosch-Fiol & Ferrer-Pérez, 2012) such as: "If a woman has been abused by her partner, she must have done something to provoke him". This scale was adopted because it had been validated with adolescents in Spain in relation to the justification of male violence against women during a relationship as gender violence. The responses were scored on a Likert scale of 1 (Totally disagree) to 4 (Totally agree). The coefficient alpha of the study sample was 0.77.

*Masculine gender role stress (MGRS)*. It was evaluated by two of the five factors of the Eisler and Skidmore scale (1987). Factors 3 and 4 were selected as being the most relevant to the teenagers. Factor 3, *Subordination to Women*: situations that place one in the position of being outperformed by women. This consists of 8 items, such as: "being with women who are more successful or who make more money"). Factor 4, *Intellectual Inferiority:* situations that question one's rational abilities or demonstrate one's uncertainty, lack of ambition or indecisiveness. This consists of 7 items, such as: "having to ask for directions when you are lost". The responses to each item were scored on a Likert scale of 0 to 5, according to which the participant believes he would feel no anxiety or extreme anxiety in the situation. The coefficient alpha of the data from the sample were 0.86 for the scale referring to subordination to

women, and 0.81 for the intellectual inferiority scale. These scales were validated and adapted to the Spanish population by Merino (2018).

*Self-esteem*. This was measured on the *Self-esteem scale* of Rosenberg (1965), widely used in the study of this construct and whose psychometric features have been studied in depth worldwide, including in Spain. The scale consists of 10 items in which the extent of agreement is scored on a Likert scale of 1 to 4, with 1 meaning Totally Disagree and 4, Totally Agree. The sample data yielded a coefficient alpha of 0.82. The version adapted and analyzed by Díaz-Aguado et al. (2011) was used.

#### Procedure

The school principals at the five schools were requested to distribute a questionnaire to the students in the grades selected via access to a blog on Internet. Consent was requested from the families through a letter sent to the counsellors at the centers involved. All the families agreed to let their children participate in the study.

All the instruments described in the "measures" section were applied online in the computer room during a morning class session. Psychologists were present during these sessions, and their observations show that the average time taken to complete the questionnaires was 50 minutes; they also noted that the adolescents had understood the questions posed and had responded to the questions with interest.

#### Data analysis

All analyses were conducted using the SPSS program version 24. Descriptive analyses were carried out to determine the descriptive statistics of the study variables. For hypothesis 1 and 2 the product-moment correlations were computed, as well as two hierarchical multiple linear regressions with the variables male adolescent dating violence against women (psychological and physical MADV) as dependent variables, and the remaining variables as predictors. Hypothesis 3, which presents the indirect or mediational effects between the justification of gender violence and MADV variables, was analyzed according to recommendations by Preacher & Hayes (2008), using bootstrap procedures to estimate the significance of the indirect effects. This procedure does not require compliance with the assumptions of regression. We used the Hayes macro, PROCESS (Hayes, 2018) via SPSS, which allows testing of the simultaneous effects of multiple mediators. The independent variable was justification of male intimate partner violence against women (JMIPVW). The two masculine gender role stress variables, subordination to women and intellectual inferiority, were used as parallel mediators. The dependent variables were MADV-Psychological and MADV-Physical. Contrasts were made of each of the indirect effects using 10,000 bootstrap resamplings, and 95% confidence intervals corrected the bias. An effect is statistically significant in  $p \le .05$  if 0 is not included in the confidence interval of 95%. Coefficients and effects are reported in unstandardized and standardized forms. Initially, the self-esteem variable was introduced as a covariate in the models of psychological aggression and physical aggression. The nonsignificant effects of self-esteem suggest the non-inclusion of this variable in the final analysis. The level of statistical significance was set at  $p \le .05$  for all the results.

#### Results

Table 1 presents the descriptive statistics, correlations and alpha coefficients of the variables used in the study.

As observed in Table 1, all the correlations were statistically significant. The justification of gendered violence shows moderate correlations both with the variables of role stress and those pertaining to psychological and physical violence. Similar results are found in the correlations of the role stress variable with both types of violence. The high correlations between both types of violence are emphasised, as well as between the two modalities of role stress.

Two hierarchical linear regression models were calculated, one for each of the violence variables.

The variable of age was inserted in first place in both models but there were no statistically significant results, probably due to the narrow range of ages, and these results were not reported. In the final models, the justification of male intimate partner violence against women (JMIPVW) variable was introduced in first place, in block 2, self-esteem and in block 3 the two role stress variables.

Table 2 presents the results for the final model for the two dependent variables, and the increases in the model following introduction of new variables.

In the case of MADV-Psychological, there were statistically significant increases in all the steps, but not so in MADV-Physical, for which step 2, which introduced the self-esteem variable, did not produce a statistically significant increase.

Table 1   Means, Standard Deviates, Intercorrelations and alpha coefficients for study variables								
Variables	М	SD	1	2	3	4	5	6
1.JIPVW	9.98	3.40	.77					
2. MGRS-STW	5.96	6.74	.48**	.86				
3.MGRS- II	8.94	6.89	.33**	.62**	.81			
4.Self-s	32.70	5.27	19**	15**	14**	.82		
5. MADV-Psy	2.90	4.37	.28**	.37**	.23**	18**	.84	
6. MADV-Phy	2.60	7.70	.36**	.31**	.18*	15**	.82**	.98

Notes: \*\* p < .01 two-tailed

 JIPVW=Justification of intimate partner violence against woman; 2.MGRS-STW=Subordination to woman; 3. MGRS-II=Intellectual Inferiority; 4. Self-s=selfesteem; 5.MADV-psy.= Male adolescent dating violence - psychological; 6.MADVphy.=Male adolescent dating violence - physical.

Bolded values on the diagonal represent Cronbach's alphas for each scale computed in the study sample.

Models of	hierarchica	0	Table 2 ressions for M cal and chang		sical and M	ADV-	
	MADV-Psychological			MADV-Physical			
	R <sup>2</sup> <sub>ad.</sub>	Change R <sup>2</sup>	Sig. Change	R <sup>2</sup> <sub>ad.</sub>	Change R <sup>2</sup>	Sig. Change	
1 (JIPVW)	.36	.13	<.001	.28	.08	<.001	
2 (Self-st.)	.37	.13	.114	.31	.09	.012	
3.(STW,II)	.42	.16	<.001	.40	.15	<.001	

Notes: MADV: Male adolescent dating violence; JMIPVW: Justification of male infimate partner violence against women;STW: Subordination to women; II: Intellectual inferiority Table 3 presents the final model coefficients for MADV-Psychological and MADV-Physical. The model for the MADV-Psychological variable is statistically significant, F(4, 334) = 16.28; p < .001, as is the model for the MADV-Physical, F(4, 334) = 17.33; p < .001.

It is observed in the case of MADV-Psychological that all the predictor variables are statistically significant except the role stress component of intellectual inferiority. For the MADV-Physical variable, all the predictor variables are statistically significant, including the two for role stress, with the exception of self-esteem. Intellectual inferiority has a negative weight, indicating that the greater the perception of intellectual inferiority, the less physical violence there is.

Two models were tested to analyse the mediation hypotheses, one for each of the MADVAW variables with the point estimators of the indirect effects, the direct effects and the total effects, and the bootstrap confidence intervals of the different effects.

Table 4 presents the regression models for the mediator variables (MGRS1-SW and MGRS2-II) and the dependent variables (MADV-Psychological and MADV-Physical).

In a first analysis, the self-esteem variable was introduced as a covariate, but its effect was not statistically significant as predictor of either the mediator variables or of the dependent variables. The analyses were repeated without the self-esteem covariate, and the effects are those shown in Table 4, and in Figure 1 and Figure 2 for MADV-Psychological and MADV-Physical, respectively.

Table 4 shows that JIPVW is a statistically significant predictor of the two mediator variables in the two models, and of the dependent variables, a requisite of the mediation tests.

Table 5 presents the total effects, and the direct and indirect effects for the two MADV-Psychological and MADV-Physical models.

In the psychological violence model, the effect of MGSR1-STW is statistically significant but not that of MGSR2-II.

In the case of physical violence, the statistically significant indirect effect of subordination to women is observed, but not that of intellectual inferiority.

	Regressio	. Table . on coefficient	s for model th	nree	
Variables	В	SE	Beta	t	р
		MADV-Psych	ological		
(Constant)	3.40	1.67		2.03	.043
JIPVW	.15	.07	.12	2.07	.039
Self-esteem	10	.04	12	-2.26	.025
MGRS-STW	.19	.04	.30	4.35	.000
MGRS-II	01	.04	01	14	.890
		MADV-Ph	ysical		
(Constant)	16	2.94		05	.957
JIPVW	.62	.13	.27	4.79	.000
Self-esteem	16	.07	08	-1.54	.125
MGRS-STW	.29	.08	.25	3.65	.000
MGRS-II	16	.07	14	-2.18	.030

Notes: B = Unstandardized coefficients; SE = Standard Error; Beta Standardized coefficients; MADV: Male adolescent dating violence; JIPVW=Justification of intimate partner violence against woman; MGRS-STW=Male gender role stress, subordination to women; MGRS-II=Intellectual inferiority

Variables	Coeff.	SE	Stan. Coeff	р	$\mathbb{R}^2$	F(df1,df2)	р
Mediators							
MGRS-STW							
JIPVW	0.95	0.09	.48	<.001	.23	F(1,337) = 100.33	<.001
Constant	-3.50	0.99		<.001			
MGRS-II							
JIPVW	0.66	0.10	.33	<.001	.33	F(1,337) = 40.15	<.001
Constant	2.35	1.10		.033			
Dependent Varial	oles						
MADV-					.15	F(3,335) = 19.76	<.00]
Psychological					.15	1(5,555) = 19.70	<.001
JIPVW	0.18	0.07	.14	.018			
STW	0.20	0.04	.30	<.001			
II	-0.00	0.04	.00	.999			
Constant	-0.26	0.72		.979			
MADV-Physical					.17	F(3,335) = 22.22	<.001
JIPVW	0.65	0.13	.29	<.001			
STW	0.29	0.08	.25	<.001			
II	0.15	0.07	13	.038			
Constant	-4.25	1.25					

Notes: Coeff. = Unstandardized coefficients; SE = Standard Error; Stan. Coeff = Standardized coefficient; MADV-Psyc=Male adolescent dating violence psychological; MADV-Phys=Male adolescent dating violence physical; JIPVW=Justification of intimate partner violence against woman; STW=Male gender role stress - subordination to women; II= Male gender role stress - Intellectual inferiority



Figure 1. Diagram of the parallel multiple mediator model for the MADV-Psychological with estimated unstandardized coefficients. Note: MADV-Psyc=Male adolescent dating violence psychological; JIPVW=Justification of intimate partner violence against woman; MGRS-STW=Male gender role stress - subordination to women; MGRSII = Male gender role stress = Intellectual inferiority

### Discussion

As expected, the results of this investigation finds in adolescents, as was already known in adults (Baugher & Gazmararian, 2015; Jakupcak et al., 2002), that MGRS, both in terms of psychological and physical aggression, mediates the relationship between MADVAW and the justification of such violence. These findings relate to those for male adults, in that endorsement of hegemonic male gender role beliefs only predicted aggression against women among men who also reported high levels of MGRS (Gallaher & Parrot, 2011; Jakupcak et al., 2002).



**Figure 2.** Diagram of the parallel multiple mediator model for the MADV-Physical with estimated unstandardized coefficients. Note : MADV-Phy =Male adolescent dating violence physical; JIPVW=Justification of intimate partner violence against woman; MGRS-STW=Male gender role stress - subordination to women; MGRSII = Male gender role stress = Intellectual inferiority

Total, indirect and direct effects of the mediation analysis								
X7 · 11		00 100		95% CI				
Variables	Effect (SE)	CS Eff.	р	Lower	Upper			
MADV-Psychological								
Total Effect (c)	0.36 (0.07)	.28	<.001	0.22	0.49			
Direct Effect (c')	0.18 (0.07)	.14	.018	.0.03	0.31			
Indirect Effects								
Total	0.18 (0.06)	.15		0.07	0.33			
MSGR-SWT $(a_1b_1)$	0.18 (0.06)	.15		0.08	0.32			
MSGR.II $(a_2b_2)$	0.00 (0.03)	.00		-0.05	-0.05			
MADV-Physical								
Total Effect (c)	0.82 (0.12)	.36	<.001	0.60	1.05			
Direct Effect (c')	0.65 (0.13)	.29	<.001	0.39	0.90			
Indirect Effects								
Total	0.17 (0.11)	.08		-0.01	0.44			
MSGR-SWT $(a_1b_1)$	0.27 (0.12)	.12		0.07	0.55			
MSGR-II $(a_{2}b_{3})$	-0.10 (0.05)	04		-0.21	0.01			

Notes: Notes: SE = Standard Error; Stan. CS Eff. = Effect Completely Standardized; MADV-Psychological=Male adolescent dating violence psychological; MADV-Physical=Male adolescent dating violence physical; JIPVW=Justification of intimate partner violence against woman; MSGR-STW=Male gender role stress - subordination to women; MSGR-II= Male gender role stress- Intellectual inferiority

These results support the recognition of MADVAW as gendered violence and, thus, the theoretical model on the role of gender, the Pleck paradigm, regarding the consequences this has for men, of the fact that they cannot conform to the traditional sexist stereotypes. To assess the importance of this result, it should be remembered, as more and more researchers now indicate (Santoro et al., 2019), that any advance in the construction of a culture of equality requires us to recognize and overcome resistance to the change that this adjustment implies. Such resistance is particularly strong in boys, as numerous investigations in Spain have shown in which there is a closer identification with sexist attitudes and justification of violence among boys than girls (De la Osa Escudero et al., 2015; Díaz-Aguado et al., 2011, 2014; Martínez-Dorado et al., 2020; Ubillos-Landa et al., 2017).

Our results are in line with other research on macro-system risk conditions (such as the correlation between the index of equality between men and women in EU countries and its prevalence in IPVAW, in FRA, 2014), and the risk conditions within the microsystem of the couple (such as the incidence of women with a higher education status than men, in Ackerson et al., 2008; Chan, 2009). This coherence supports the ecological model from the gender perspective on which this research is based.

Previous research in Spain found that low self-esteem was a MADVAW risk condition, emphasizing the particular resistance to change that the emotional component of machismo in boys seemed to generate, and the need to understand it better in order to offset it (Díaz-Aguado et al., 2014; Díaz-Aguado & Martínez, 2015). Our results show that, at the beginning of adolescence, it is MGRS related to situations of subordination to women that is a much better predictor of MADV than low self-esteem. In this sense, most previous research that discovered a relation between IPVAW and self-esteem was carried out on adult males or young boys older than those surveyed in our study (Cowan, & Mills, 2004; Díaz-Aguado & Martínez, 2015; Díaz-Aguado et al., 2014); on the other hand, other studies of young boys similar in age to ours found no link between MADVAW and self-esteem (Foshee et al., 2001). These results suggest as a hypothesis that the lower level of self-esteem in men who inflict intimate partner violence against women could be due in part to having experienced MGRS in their early years of adolescence, a hypothesis in line with the process described by Cowan, & Mills (2004) to explain the relation between self-esteem and IPVAW.

The main contribution of this study is having detected that the MGRS factor subordination to women (an emotional component of machismo) is an important risk condition of MADVAW from the start of adolescence, the age when dating relationships begin in Spain (Díaz-Aguado et al., 2011, 2014). At this age, boys who experience situations of subordination to women could use MADVAW as a form of protecting the dominance they feel is under threat, a process that had already been detected in adult males (Levant, 2011; Gallagher & Parrot, 2011) and which could increase as women advance towards equality with men. Thus, to improve the efficacy of the programmes of prevention of MADVAW, they must include a range of opportunities for collaboration between boys and girls in which boys learn to overcome their feelings of stress generated in situations when girls perform better at school or assume control of a situation, as can often happen in the context of high school, thereby counteracting the influence of sexist messages that cause boys to experience these situations as threats to their masculinity.

The visibility of masculine models that present situations of subordination to women as normal and desirable could also be very effective, given the efficacy of these models in helping override the emotional component of sexist attitudes when based on swapping situations in which men and women are briefly put under the leadership of someone of the opposite sex.

The main limitations of this study are the incidental nature of the sample and the absence of any longitudinal follow-up. To overcome these limitations, it would be convenient to carry out a longitudinal study of the relation between MADVAW-Psychological and MADVAW-Physical and the various components of MGRS, analysing their evolution across different social classes and cultural groups. It would also be interesting to develop programmes to prevent MADVAW with particular focus on the emotional component involved in situations of subordination to women, in order to measure how it is possible to overcome resistance to modifying this emotional component, which seems to relate to some men's reluctance to accept women's progress to equality with men.

#### References

- Ackerson, L. K., Kawachi, I., Barbeau, E. M., & Subramanian, S. V. (2008). Effects of individual and proximate educational context on intimate partner violence: A population-based study of women in India. *American Journal of Public Health*, 98(3), 507-514.
- Anderson, K.L. (2005). Theorizing Gender in Intimate Partner Violence Research. Sex Roles, 52, 853-865. https://doi.10.1007/s11199-005-4204-x
- Baugher, A., & Gazmararian, J. (2015). Masculine gender role stress and violence: Aliterature review and future directions. *Aggression and Violent Behavior* 24, 107-112. https://doi.org/10.1016/j.avb.2015.04.002
- Bradbury-Jones, C., Appleton, J. V., Clark, M., & Paavilainen, E. (2019). A profile of gender-based violence research in Europe: Findings from a focused mapping review and synthesis. *Trauma, Violence, & Abuse*, 20(4), 470-483. https://doi.10.1177/1524838017719234
- Bosch-Fiol, E., & Ferrer-Pérez, V. A. (2012). New map of the myths about gender violence in XXI century. *Psicothema*, 24(4), 548-554.
- Bronfenbrenner, U. (1979). *The Ecology of Human Development*. Harvard University Press.
- Chan, K. (2009). Sexual violence against women and children in Chinese societies. *Trauma Violence & Abuse*, 10(1), 69-85. https://doi. org/10.1177/1524838008327260
- Cowan, G., & Mills, R. D. (2004). Personal inadequacy and intimacy predictors of men's hostility toward women. Sex Roles, 51(1-2), 67-78.
- De la Osa, Z., Gómez, S. A., & Gómez, I. P. (2015). Beliefs about gender violence. Sexism in adolescent relationships. *European Journal of Investigation in Health, Psychology and Education*, 3(3), 265-275. https://doi.10.1989/ejihpe.v3i3.49
- Díaz-Aguado, M.J., & Martínez, R. (2015). Types of adolescent male dating violence against woman, self-esteem and justification of dominance and aggression. *Journal of Interpersonal Violence*, 30(15), 2636-2658. https://doi.org/10.1177/0886260514553631
- Díaz-Aguado, M.J., Martínez Arias, R., & Martín Babarro, J. (2011). Igualdad y prevención de la violencia de género en la adolescencia [Equality and the prevention of violence against women in adolescence]. Ministerio de Sanidad, Política Social e Igualdad.
- Díaz-Aguado, M.J., Martínez Arias, R., & Martín Babarro, J. (2014). Evolución de la adolescencia española sobre la igualdad y la prevención de la violencia de género [Evolution of Spanish adolescence on equality and the prevention of violence against women]. Ministerio de Sanidad, Asuntos Sociales e Igualdad.
- Eisler, R. M., & Skidmore, J. R. (1987). Masculine gender role stress: Scale development and component factors in the appraisal of stressful situations. *Behavior Modification*, 11(2), 123-136.
- Exner-Cortens, D., Gill, L., & Eckenrode, J. (2016). Measurement of adolescent dating violence: A comprehensive review (Part 1, behaviors). *Aggression and violent behavior*, 27, 64-78. https://doi.org/10.1016/j. avb.2016.02.007
- Ferrer-Pérez, V. A., & Bosch-Fiol, E. (2019). Gender in the analysis of intimate partner violence against women: From gender "blindness" to gender-specific research. *Anuario de Psicología Jurídica*, 29(1), 69-76. https://doi.org/10.5093/apj2019a3
- Foshee, V., Linder, F., MacDougall, J., & Bangdiwala, S. (2001). Gender differences in the longitudinal predictors of adolescent dating violence. *Preventive Medicine*, 32(2), 128-141.
- FRA (2014). Violence against women: An EU-wide survey. Main results. European Union Agency for Fundamental Rights.
- Gallagher, K., & Parrott, D. (2011). What accounts for men's hostile attitudes toward women? The influence of hegemonic male role norms and masculine gender role stress. *Violence against Women*, 17(5), 568-583. https://doi.10.1177/1077801211407296.
- Hayes, A. F. (2018). Introduction to mediation, moderation, and conditional process analysis: A regression-based approach. 2<sup>nd</sup>. Ed. Guilford Press
- INE (2018). *España en cifras 2018* [Spain in numbers 2017]. Instituto Nacional de Estadística.
- Jakupcak, M., Lisak, D., & Roemer, L. (2002). The role of masculine ideology and masculine gender role stress in men's perpetration of relationship violence. *Psychology of Men and Masculinity*, 3(2), 97-106.

- Krug, E., Dahlberg, L., Mercy, J., Zwi, A., & Lozano, R (2002). World report on violence and health. World Health Organization.
- Levant, R. (2011). Research in the psychology of men and masculinity using the gender role strain paradigm as a framework. *American Psychologist*, 66(8), 765-776. https://doi.10.1037/a0025034.
- Martínez-Dorado, A., Privado, J., Useche, S. A., Velasco, L., García-Dauder, D., & Alfaro, E. (2020). Perception of dating violence in teenage couples: A cross validation study in Spain and Colombia. *International Journal of Environmental Research and Public Health*, 17(18), 6769. https://doi.10.3390/ijerph17186769
- Merino, E. (2018). Sexismo, amor romántico y violencia de género en la adolescencia [Sexism, myths of romantic love and gendered violence in adolescence]. Premio de la Delegación del Gobierno contra la Violencia de Género a Tesis Doctorales sobre Violencia contra la Mujer. Ministerio de Sanidad, Consumo y Bienestar Social.
- Muñoz-Rivas, M. J., Andreu Rodríguez, J.M, Graña Gómez, J. L., O'Leary, K. D., & González Lozano, M. (2007). Validation of the modified version of the Conflicts Tactics Scale (M-CTS) in a Spanish population of youths. *Psicothema*, 19(4), 693-698.
- Pleck, J. H. (1995). The gender role strain paradigm: An update. In R. F. Levant & W. S. Pollack (Eds.), A new psychology of men (pp. 11-32). Basic Books.
- Preacher, K.J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40(3), 879-891. https:// doi.10.3758/BRM.40.3.879
- Puente-Martínez, A., Ubillos-Landa, S., Echeburúa, E., & Páez-Rovira, D. (2016). Risk factors associated with the violence against women in couples: A review of meta-analyzes and recent studies. *Anales de Psicología*, 32(1), 295-306. https://doi.org/10.6018/analesps.32.1.189161
- Reidy, D. E., Smith-Darden, J. P., Cortina, K. S., Kernsmith, R. M., & Kernsmith, P. D. (2015). Masculine discrepancy stress, teen dating violence, and sexual violence perpetration among adolescent boys. *Journal of Adolescent Health*, 56(6), 619-624. https://doi.10.1016/j.jadohealth.2015.02.009
- Reidy, D., Smith-Darden, J., Vivolo-Kantor, A., Malone, C., & Kernsmith, P. (2018). Masculine discrepancy stress and psychosocial maladjustment: Implications for behavioral and mental health of adolescent boys. *Psychology of Men & Masculinity*, 19(4), 560-569. https://doi.org/10.1037/men0000132
- Reyes, H. L., Foshee, V. A., Niolon, P. H., Reidy, D. E., & Hall, J. E. (2016). Gender role attitudes and male adolescent dating violence perpetration: Normative beliefs as moderators. *Journal of Youth and Adolescence*, 45(2), 350-360. https://doi.10.1007/s10964-015-0278-0
- Rosenberg, M. (1965). Society and the adolescent self-image. Princeton University Press.
- Santoro, C., Martínez-Ferrer, B., Monreal Gimeno, C., & Musitu, G. (2018). New directions for preventing dating violence in adolescence: The study of gender models. *Frontiers in Psychology*, 9, 946. https:// doi.org/10.3389/fpsyg.2018.00946
- Shen, A., Chiu, M., & Gao, J. (2012). Predictors of dating violence among Chinese adolescents: The role of gender-role beliefs and justification of violence, *Journal of Interpersonal Violence*, 27(6), 1066-1089. https:// doi.10.1177/0886260511424497
- Smith, K., Cénat, J., Lapierre, A., Dion, J., Hébert, M., & Côté, K. (2018). Cyber dating violence: Prevalence and correlates among high school students from small urban areas in Quebec. *Journal of Affective Disorders*, 234, 220-223. https://doi.org/10.1016/j.jad.2018.02.043
- Stith, S. M., Green, N. M., Smith, D. B., & Ward, D. B. (2008). Marital satisfaction and marital discord as risk markers for intimate partner violence: A meta-analytic review. *Journal of Family Violence*, 23(3), 149-160. https://doi.10.1007/s10896-007-9137-4
- Straus, M. A., Hamby, S. L., Boney-McCoy, S., & Sugarman, D. B. (1996). The revised conflict tactics scales (CTS2) development and preliminary psychometric data. *Journal of Family Issues*, 17(3), 283-316.
- Ubillos-Landa, S., Goiburu-Moreno, E., Puente-Martínez, A., Pizarro-Ruiz, J. P., & Echeburúa-Odriozola, E. (2017). Assessment of distorted thoughts about women and violence of Basque-speaking Secondary School Students. *Revista de Psicodidáctica*, 22(1), 1-8. https:// doi.10.1387/RevPsicodidact.16124

- Wesche, R., & Dickson-Gómez, J. (2019). Gender attitudes, sexual risk, intimate partner violence, and coercive sex among adolescent gang members. *Journal of Adolescent Health*, 64, 648-656. https://doi. org/10.1016/j.jadohealth.2018.10.292
- WHO (2013). Responding to intimate partner violence and sexual violence against women: WHO clinical and policy guidelines. World Health Organization.