Longitudinal associations between features of toxic masculinity and bystander willingness to intervene in bullying among middle school boys☆

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ABSTRACT

Bystander intervention (i.e., a third party decides to defend a victim when witnessing a conflict) has been identified as an effective strategy to resolve bullying incidents (O’Connell, Pepler, & Craig, 1999). Researchers suggest that student willingness to intervene (WTI) is a robust predictor of bystander intervention (Nickerson, Aloe, Livingston, & Feeley, 2014). Toxic masculinity has been defined as “the constellation of socially regressive [masculine] traits that serve to foster domination, the devaluation of women, homophobia, and wanton violence” (Kupers, 2005, p. 71). Though some aspects of toxic masculinity (e.g., low empathy) have received some empirical attention regarding their role in determining prosocial behavior, many aspects of toxic masculinity have not. Little research has examined how constructs such as attitudes surrounding bullying and sexual harassment, social dominance orientation, and homophobic bullying are related to longitudinal changes in WTI across adolescence. The present study uses growth mixture modeling (GMM) to examine the heterogeneity of WTI among middle school boys in the Midwest (N = 805). Students were classified into three profiles of WTI over time: a “stable high” class (70.9%), a “decreasing” class (22%), and a “stable low” class (7.1%). When compared with the “stable high” class, students with higher levels of dominance and pro-bullying attitudes were associated with an 11% (AOR = 1.11, 95% CI [1.01–1.21] and a 55% (AOR = 1.55, 95% CI [1.05–2.31] increase in the odds of being in the “decreasing” class, respectively. Youth who reported higher rates of homophobic name calling perpetration had a 16% (AOR = 1.16, 95% CI [1.02–1.34] increase in the odds of being in the stable low class compared to the stable high class. Additionally, both homophobic name calling victimization and empathy were associated with a 17% (AOR = 0.83, 95% CI [0.70–0.98] and 18% (AOR = 0.82, 95% CI [0.69–0.98] lower odds of being in the stable low class. The findings support the theoretical framework which posits that features of toxic masculinity are associated with less WTI and thus carry implications for intervention design (Carlson, 2008; Leone et al., 2016).

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1. Introduction

Bystander interventions are often an effective strategy to diffuse bullying conflicts (O’Connell, Pepler, & Craig, 1999). There are several ways the literature has conceptualized by standing behaviors including non-action (e.g., failing to take action when witnessing bullying conflict) and prosocial actions (e.g., defending the victim, challenging the bully, or telling others; O’Connell et al., 1999; Salmivalli, 1999). However, prior studies note that, on average, students intervene in only 20% of total bullying conflicts witnessed (Atlas & Pepler, 1998; Hawkins, Pepler, & Craig, 2001).

Latané and Darley (1970) identify failure to take intervention responsibility as a barrier to executing active bystander intervention. Also conceptualized as willingness to intervene (WTI), this construct has been studied as a useful point of intervention toward prosocial behavior change (see meta-analysis by Polanin, Espelage, & Pigott, 2012). Arguably, before other barriers can be addressed (e.g., training on risk assessment, intervention efficacy or skills) individuals must be willing to take action (Nickerson, Aloe, Livingston, & Peeley, 2014). Willingness to intervene is a construct that has been examined in the context of bystander intervention in instances of bullying (i.e., aggression often between youth characterized by intent to harm, repetition, and a power imbalance between perpetrator and victim; Olweus, 1993) and related forms of aggression (Caravita, Di Blasio, & Salmivalli, 2009; Espelage, Green, & Polanin, 2012a; Gini, Albiero, Benelli, & Altoè, 2007; McMahon & Banyard, 2012; Rigby & Johnson, 2006). However, several studies suggest that average WTI decreases as students transition from childhood to adolescence (Batanova, Espaleza, & Rao, 2014; Espelage et al., 2012a; Rigby & Johnson, 2006). Thus, it is important to understand heterogeneity in WTI during the course of adolescence and what predicts changes (e.g., increasing, decreasing) in WTI.

Prior research has identified several common reasons why youth may not be willing to intervene such as true or perceived skill deficit, lack of empathy for the victim, or inability to recognize bullying (Jolliffe & Farrington, 2006; Latané & Darley, 1970). However, past theoretical work suggests that aspects of toxic masculinity (defined as “the constellation of socially regressive [masculine] traits that serve to foster dominance, the devaluation of women, homophobia, and wanton violence”) (Kupers, 2005, p. 71) are associated with a lower likelihood of engaging in helping behavior (Carlson, 2008; Leone, Parrott, Swartout, & Tharp, 2016; Tice & Baumeister, 1985; Yousaf, Popat, & Hunter, 2015). Specifically, components and correlates identified in extant literature include adhering to a traditional masculine ideology, being dismissive of sexual harassment, internalizing a social dominance orientation, having positive attitudes related to bullying behaviors, and engaging in homophobic teasing (Espelage, Basile, & Hamburger, 2012b; Leone et al., 2016). For example, in a study on gender role stress as a barrier to bystander intervention in male to female aggressive conflict, Leone, Parrott, Swartout, and Tharp (2016) found that men who believed it was important for men to embody aggression and toughness reported significantly more perceived social consequences and less confidence associated with intervening as a bystander than men who did not endorse these beliefs. Additionally, in another study of undergraduate men, Leone, Parrott, and Swartout (2017) found a significant association between reported presence of a misogynistic male peer norm as well as male gender role stress and likelihood of intervening in a male to female aggressive conflict. While these findings provide a useful foundation for understanding how traditional masculine ideologies influence helping behavior such as WTI, much of this work is cross-sectional or includes short-term longitudinal studies (e.g., two time points) and use entire sample or demographic averages (i.e., do not separate by latent classes determined by other relevant variables, do not examine within-person comparisons). These analyses fail to capture (1) a detailed understanding of how WTI changes over time and (2) heterogeneity in WTI among students beyond average gender and age differences. To our knowledge, no existing study has addressed these shortcomings that may hold important implications for intervention efforts and design.

1.1. Theoretical and empirical research on masculinity and willingness to intervene

For the purposes of the current study, masculinity is defined as the traditional masculine ideology that captures the connection between an individual and the understanding of the cultural definition of the masculine identity (Pleck, Sonenstein, & Ku, 1993). Broadly, this construct reflects an individual’s beliefs about what men are like, how they should act, and how important it is to embody societal-determined masculine norms (Pleck et al., 1993). To clarify terms, we refer to toxic masculinity as a form of traditional masculinity that becomes harmful to others in the ways described above (Kupers, 2005).

Expressions of masculinity vary between individuals and cultures (Arciniega, Anderson, Tovar-Blank, & Tracey, 2008; Imms, 2000; Kimmel & Mahler, 2003; Lyons, Carlson, Thuram, Grant, & Gipson, 2006; Grant, Pascoe, 2003). However, several commonalities underlie many definitions. Thompson and Pleck (1986) identify three core components: toughness, antifemininity, and power. Toughness is the notion that men should be physically strong, emotionally callous, and behaviorally aggressive. The second is antifemininity, meaning that masculinity includes a complete rejection of qualities traditionally considered feminine, such as emotionality or helping behavior. The third is status, or the idea that men must work toward attaining power and agency (e.g., socially, financially), and thus the respect of others.

The Theory of Precarious Manhood (Vandello, Bosson, Cohen, Burnaford, & Weaver, 2008) is a useful lens for understanding associations between masculinity and helping behavior. This theory posits that patriarchal societal norms treat masculinity as a highly valuable, socially conferred, hard won, and easily lost status that requires constant demonstrations of worthiness (Vandello & Bosson, 2013; Vandello et al., 2008). Thus, to gain or retain this valuable badge, one must engage in acts that embody the aforementioned elements of toughness, antifemininity, and status (Vandello & Bosson, 2013; Vandello et al., 2008).

There is a growing body of literature that investigates how endorsing beliefs or behaviors associated with traditional masculine norms is associated with lower likelihood of intervening as an active bystander (Carlson, 2008; Leone et al., 2016; Yousaf et al., 2015). In very early studies, Tice and Baumeister (1985) found that men who expressed gender in a more traditionally feminine or
androgynous way were more likely to intervene in an apparent emergency compared to men who adhered to traditionally masculine norms. Following up nearly 30 years later, Casey and Ohler (2012) conducted a qualitative study among men recently involved in organizations dedicated to preventing violence against women. In the study, men shared that when debating to intervene when witnessing sexual assault, they perceived gender norms and expectations as a barrier to intervening. In addition, other studies have found support for this phenomenon specifically as it relates to helping (e.g., consoling the victim, calling for more help) and defending (e.g., standing up to the perpetrator) behavior (Leone et al., 2016). For example, among adults, Carlson (2008) found that men would not intervene in a conflict if their reputation as traditionally masculine could be compromised. Similarly, Leone et al. (2016) found that adult men who endorsed the belief that men should be strong and aggressive were more likely to perceive negative social consequences associated with intervening as an active bystander. Another study found that undergraduate men who endorsed having a precarious sense of manhood were significantly less likely to confront another man (a study confederate) about his homophobic language use than their counterparts who did not endorse having a strong sense of precarious manhood (Kroeper, Sanchez, & Himmelstein, 2014).

Together these findings indicate that, for men who adhere to a traditional masculine identity, helping behavior may constitute a potential threat to one's sense of manhood. In its entirety, gender and adherence to traditional gender norms are influential factors in bystander intervention. Thus, prior theoretical and empirical work provides support for examining the role of adherence to traditionally masculine ideologies as a hindrance of WTI. However, missing from the literature is an investigation of how various components or manifestations of traditionally masculine ideologies (correlates of toxic masculinity) influence WTI among youth.

1.2. Toxic correlates of traditional masculinity and associations with willingness to intervene

For purposes of the current research, we have grounded the concept of traditional masculine ideologies and deconstructed the “constellation of socially regressive traits” into components and correlates that include (lack of) empathy, positive attitudes toward sexual harassment and bullying, social dominance orientation, and involvement in homophobic teasing. This aims to better capture attitudinal and behavioral manifestations of traditional masculinity.

(Lack of) empathy. Empathy, defined as the ability to identify with and share in another person’s emotional experience, is a well-established correlate of active intervening and defending behavior. Empathy is a multidimensional construct, containing distinct cognitive (i.e., the ability to shift to another person's vantage point; Davis, 1994) and emotional (i.e., the ability to identity, understand, and share someone's feelings; Eisenberg & Fabes, 1998) components. Empathy is positively associated with prosocial behaviors (including active intervening and defending behavior) and negatively associated with aggressive behaviors (including bullying; Stavrinides, Georgiou, & Theofanous, 2010). Notably, during adolescence, girls report higher levels of empathy than their male counterparts (Van Cleemput, Vandebosch, & Pabian, 2014).

Several studies have examined empathy as it specifically relates to WTI, but more robust work addresses the direct link between empathy and bystander intervention behavior, more broadly. Espelage, Green, and Polanin (2012) found that for boys only, being proficient in perspective taking (a cognitive component of empathy) was predictive of higher WTI but no significant association was found between emotional components of empathy and WTI. A somewhat similar pattern of findings emerged in a study conducted by Gini et al. (2007) which found a significant, positive, association between empathy and active prosocial bystander intervention behavior for boys but not for girls. Van Cleemput et al. (2014) found that low empathy was associated with joining in on the bullying aggression in a conflict they witnessed and, in contrast, students who intervened to defend the victim reported higher average levels of empathy (Van Cleemput et al., 2014). Bellmore, Ma, You, and Hughes (2012) conceptually replicated this finding using responses to vignette scenarios and found that students with higher empathy were significantly more likely to report hypothetically engaging in all three forms of helping behavior (telling a teacher, confronting the bully, comforting the victim). Therefore, despite some inconsistency in the facets of empathy that predict intervention, it follows that, among youth who display low empathy, in addition to having higher rates of aggression, they are less willing to intervene, as this would not conform to traditional masculine norms (Leone et al., 2016).

Attitudes regarding sexual harassment and bullying. Given that bullies are less likely to be active bystanders, a growing body of literature has investigated pro-bully attitudes in relation to bystander behavior. Several studies (Rigby & Johnson, 2006; Salmivalli & Voeten, 2004) found that pro-bully attitudes were associated with negative bystander behaviors like defending and reinforcing the bully. Espelage and colleagues (2012a) found pro-bully attitudes and WTI to be highly negatively correlated, though this association was stronger in middle school boys than in girls.

Relatedly, with the onset of puberty during middle school, bullying often takes the form of sexual harassment, defined as unwelcomed behavior of a sexual nature that interferes with equal treatment and opportunity (Espelage et al., 2012b; Pellegrini & Long, 2002; U.S. Department of Education Office for Civil Rights, 2010). Several studies have found individuals’ attitudes regarding the degree to which sexual harassment is problematic to be associated with bystander intentions in both adolescent and college-age populations such that attitudes supportive of sexual aggression are associated with less WTI (Brown & Messman-Moore, 2010; Temkin & Krahé, 2008). Further, individuals who report lower acceptance of rape myths (another conceptualization of individual perceptions of sexual violence as problematic) are reliably more willing to intervene in instances of sexual violence (Frese, Moya, & Megías, 2004; McMahon, 2010).

Social dominance. Social Dominance Theory (Sidanius & Pratto, 1993) posits that societies create ideologies and mechanisms that legitimize and maintain social oppression of marginalized groups. Subsequently, Social Dominance Orientation refers to an individual’s “degree of preference for inequality among social groups” (Pratto, Sidanius, Stallworth, & Malle, 1994, p. 741). According to Sidanius and Pratto (1993), individuals who adhere to this orientation develop ideologies to legitimize social inequality,
and often engage in behaviors that enforce the perceived social hierarchy (Hart, Hung, Glick, & Dinero, 2012). Among adult populations, stable social dominance orientation is correlated with discriminatory attitudes toward marginalized groups, unwillingness to help members of these groups directly, rejection of social programs aimed to help these groups, and greater social distance (Hart et al., 2012; Pratto et al., 1994; Sidanius, Pratto, & Bobo, 1996; Sidanius, Pratto, & Mitchell, 1994). Regarding adolescents, Goodboy, Martin, and Rittenour (2016) found social dominance to predict physical bullying behavior for male students only. Though this construct has yet to be studied in relation to bystander intervention in bullying, the preponderance of evidence indicates that there is an association between believing in social status inequality and behaviors that are aggressive and are not prosocial. Theoretically, this association would generalize to other prosocial behaviors, including intervening in bullying, an interaction characterized by re-inforcing a power imbalance. Further, this relation appears to be especially prevalent in boys and men, and appears as early as adolescence and childhood (Dahl, Vescio, & Weaver, 2015; Goodboy et al., 2016; Messinger, 2011; Reijntjes et al., 2016).

Homophobic bullying perpetration and victimization. Another common manifestation of bullying in middle and high school is homophobic bullying or homophobic name-calling, which can be defined as the use of slurs, teasing, social exclusion, threats of physical violence, and physical assaults based on known or perceived sexual orientation (Basile, Espelage, Rivers, McMahon, & Simon, 2009; Espelage, Basile, Leemis, Hipp, & Davis, 2018a; Kimmel & Mahler, 2003). These instances of aggression serve to reinforce norms of heterosexuality, and demean non-traditional gender expression and non-heterosexual identities (Meyer, 2008). Literature indicates that boys consistently engage in homophobic perpetration at higher rates than girls (Poteat & DiGiovanni, 2010). Additionally, in a longitudinal study of students from 7th through 12th grade, Poteat, O'Dwyer, and Mereish (2012) found on average, homophobic bullying increased for boys and declined for girls. These findings align with the traditional masculinity framework, as boys are more incentivized to protect their own masculinity status by attacking the masculinity of their peers.

To the authors’ knowledge, no work has explicitly examined homophobic bullying as it relates to WTI, these constructs are ostensibly mutually relevant given that homophobic bullying is a tool to reinforce a heterosexist (and thereby masculinized) social hierarchy. It follows that individuals who actively engage in this phenomenon are not likely to disrupt other instances of individuals doing the same. In contrast, individuals who are victimized may thereby learn to avoid conflict for fear of re-victimization, though literature linking generic bully victimization and intervention indicates that previously victimized youth are more likely to notice a conflict and intervene than former bullies or non-participants (Jenkins & Nickerson, 2017).

1.2.1 Current study

Several researchers have identified adolescence as a time when traditional gender expression is heavily socialized and enforced (Heinze & Horn, 2014; Payne & Smith, 2016). It is therefore useful to examine the context of gender constructing and socializing as relevant to developing patterns of behavior. Given that the majority of the literature on toxic masculinity concerns the behavior of males, we examined predictors of WTI in middle school boys only. However, little work has examined how toxic masculinity constructs such as (lack of) empathy, positive attitudes surrounding bullying and sexual harassment, social dominance orientation, and homophobic bullying are related to changes in WTI during adolescence. Thus, the current study used growth mixture modeling to examine the extent to which correlates of toxic masculinity are associated with longitudinal trajectories of WTI. We hypothesized (Hypothesis 1) that there would be significant heterogeneity in WTI over the course of middle school representing at least two distinct class trajectories of WTI. Further, we hypothesized (Hypothesis 2) that the aforementioned dimensions of toxic masculinity would be associated with higher odds of membership in classes demonstrating low WTI. Finally, we hypothesized (Hypothesis 3) that youth in classes defined by low WTI would evidence higher mean levels of toxic masculinity dimensions and lower levels of empathy at the end of middle school, controlling for early middle school levels. The current research adds to the literature surrounding bystander intervention as a violence reduction strategy by clarifying who is unwilling to intervene, highlighting a segment of the school population for whom bystander efficacy interventions may not be effective. These results will inform intervention design regarding who is not likely to benefit from bystander intervention training and which culturally embedded, gender-based, early signals predict low WTL.

2. Methods

2.1. Participants

Students from four middle schools in the U.S. Midwest were surveyed four times: Spring 2008, Fall 2008, Spring 2009, and Fall 2009. At Wave 1, the sample was 48.8% male. Regarding race, the sample identified as 47.7% Black, 36.4% White, 3.4% Hispanic, 1.7% Asian/Pacific Islander, and 10.8% another racial identity. Students’ ages ranged from 11 to 16 years at Wave 1 (M = 12.80; SD = 1.07). On average, mother’s education reported by the student participants indicated some college. Free or reduced cost lunch across the schools participating in the study averaged 70%. The current study utilized only male respondents during middle school, thus our analytic sample was N = 805. See Table 1 for demographic information.

2.2. Procedures

A waiver of active parental consent (opt-out procedure) was approved by the University Institutional Review Board and the school district administration, so parents only returned signed informational letters if they did not wish for their child to participate. Data collection took place in school during regular school hours, and trained proctors were present to obtain student assent, describe the study, read the survey aloud while students completed the survey, and answer any questions. Students could opt out if they did not
wish to participate. The survey took approximately 30 min to complete. Resources were provided to each participant at each wave (see Espelage et al., 2018a; Espelage, Davis, Basile, Rostad, & Leemis, 2018b for more details on study procedure).

### 2.3. Measures

**Willingness to Intervene (WTI).** To assess students’ WTI when other students are victimized, we used the University of Illinois 5-item Willingness to Intervene scale (Espelage et al., 2012a). Students are asked how much they agree on a 4-point Likert scale (“Strongly Disagree” (0) through “Strongly Agree” (3)) with statements about intervening directly or indirectly when witnessing peer victimization (e.g., “When a kid is being teased, I stick up for him/her”, “If a good friend is being teased a lot, I will tell an adult in my school”). Two items (e.g., “If other students are being teased too much, it's not my problem” and “I don't care what mean things kids say, as long as it’s not about me”) were recoded such that higher scores indicated higher WTI. Construct validity has been supported through exploratory and confirmatory analyses where a one-factor model fit the data ($\chi^2$ (1, 65,953) = 4950.72, $p < 0.001$; CFI = 1.00 and RMSEA = 0.03; Batanova et al., 2014). In the current study, the Cronbach’s alpha ranged from .82 through .88 ($M_{\alpha} = 0.85$) across waves.

**Empathy.** The 5-item Empathy subscale of the Teen Conflict Scale (Bosworth & Espelage, 1995) measures adolescents’ ability to listen to, care for, and trust others at Waves 1 and 4. For each item in the scale (e.g., “I can listen to others” and “I get upset when my friends are sad”), students are asked to indicate how often they would describe themselves on a 5-point Likert scale with options ranging from “Never” (0) through “Always” (4). Higher values indicate more frequent empathic behaviors. In the current study, Cronbach’s alphas ranged from .71 through .76 ($M_{\alpha} = 0.74$) across waves. In a study of fifth and sixth graders, self-reported empathy scores from the Teen Conflict scale were found to correlate significantly with prosocial behavior as rated by the child’s teacher (McMahon, Wernsman, & Parnes, 2006).

**Homophobic Name-Calling Perpetration and Victimization.** The 10-item Homophobic Content Agent Target Scale assesses homophobic name-calling perpetration and victimization in middle school (Poteat & Espelage, 2007). The current study measured this construct at Waves 1 and 4. To assess perpetration, students are asked “How many times in the last 30 days did you say homo, gay, lesbo, or fag to the following individuals?” Students are then presented with five items: (1) a friend, (2) someone you did not know well, (3) someone you did not like, (4) someone you thought was gay or lesbian, and (5) someone you did not think was gay or lesbian. Response options included “Never,” “1 or 2 times,” “3 or 4 times,” “5 or 6 times,” and “7 or more times” on a 5-point Likert-type scale (0–4). The five-item victimization scale consisted of the same items and response options, except that students are asked how often others (e.g., friends) called them homophobic epithets. Construct validity has been supported through exploratory and confirmatory analyses with the perpetration scale factor loadings ranged from .59 to .71 accounting for 41% of the variance and the victimization scale factor loadings ranged from .56 to .71 accounting for 15% of the variance and males scored significantly higher than females on the two scales (Poteat & Espelage, 2005). Moreover, the perpetration scale was strongly associated with bully perpetration ($r = 0.61$). The negative association between perspective-taking skills and the perpetration scale ($r = −0.28$ for males) provides evidence for discriminant validity of the scale (Poteat & Espelage, 2005). Cronbach’s alpha coefficient was .85 for Wave 1.

**Traditional Masculinity.** The seven-item traditional masculinity scale of the Adolescent Masculinity Ideology in Relationships Scale (AMIRS; Chu, Porche, & Tolman, 2005) assesses the level of traditional masculinity attitudes held by an individual. Scores from Waves 1 and 4 were used for this analysis. It can be used to assess either males or females on their traditional masculinity attitudes. The AMIRS is unique in that it was created specifically for use with adolescents whereas most measures of masculinity attitudes are created for use with an adult population (Chu et al., 2005). Additionally, it was created to specifically assess adolescent masculinity within relationships. The scale includes items like “It’s important for a boy to act like nothing is wrong, even when something is bothering him” and “Boys should not let it show when their feelings are hurt.” Students are asked how much they agree with statements on a 4-point Likert-type scale (0 “Strongly Disagree” through 3 “Strongly Agree”). The AMIRS has been shown to be
moderately correlated with the Male Role Attitudes Scale (Snell, 1989) \((r = 0.48)\), suggesting convergent validity (Chu et al., 2005). Additionally, it has been shown to be negatively correlated with the Attitudes Towards Women Scale for Adolescents, which is a measure of unconventional attitudes toward women's roles and rights (Galambs, Petersen, Tobin-Richards, & Gitelson, 1985) \((r = -0.42)\), providing evidence of discriminant validity. Cronbach's alpha coefficient was .83 for Wave 1.

**Social Dominance.** Drawing on the literature on social information processing related to proactive aggression (Dodge & Coie, 1987) and social dominance theory, we adapted a six-item teacher checklist on youth's need for dominance among peers and their use of aggression to get their way (Pellegrini & Long, 2002). Students are asked at Waves 1 and 4 how well each item described them and included items like “I enjoy being the center of attention,” “I am usually a leader of my group of friends,” and “I can force others to do what I want.” Response options are on a scale ranging from “Does not describe me at all” \((0)\) through “Describes me well” \((4)\). Results from a CFA of late middle school data revealed adequate model fit \((\text{CFI} = 0.90, \text{RMSEA} = 0.10, \text{SRMR} = 0.05, \chi^2 = 186.1, p < 0.01)\) with all items loading between 0.48 and 0.77 (Espelage et al., under review). Cronbach's alpha coefficient was .77 for Wave 1.

**Dismissive Attitudes toward Sexual Harassment.** The National Institute of Justice Survey of Attitudes and Behaviors Related to Sexual Harassment (Taylor, Stein, Woods, & Mumford, 2011) assesses dismissive attitudes toward sexual harassment and this scale was developed with a series of expert panels and factor analyses (Taylor et al., 2011). Waves 1 and 4 were used here. Example items include, “Girls are asking to be harassed when they wear short skirts and tight clothes” and “Sexual harassment isn’t a serious problem in school.” Respondents are asked to indicate on a 4-point scale how much they agree or disagree with each statement. Response options range from “Strongly Disagree” \((0)\) through “Strongly Agree” \((3)\). Higher scores corresponded to a more positive view of bullying. In this study, Cronbach's alpha coefficient was .70 for Wave 1. Convergent validity has been demonstrated with correlations between this scale and greater rates of bully perpetration (Espelage, Hong, Kim, & Nan, 2018c). Further, the predictive validity of this scale was confirmed in a study where scores on this measure correlated with self-reported relational and physical aggression assessed one year later (Low, Espelage, & Polanin, 2013) and was associated with bullying perpetration (Walters & Espelage, 2018).

### 2.4. Analytic plan

To assess profiles (heterogeneity) of WTI during middle school, we conducted growth mixture modeling (GMM) using data that spanned 6th through 8th grade. When estimating GMMs, each class was allowed to freely estimate its own mean, variance, covariance, and residual variance. We used log likelihood ratio tests to assess the need for random linear slopes. To determine the best fitting model, we estimated separate models from one to four latent class solutions. To assess which model best fit the data, we considered several model fit indicators including: reductions in negative two log likelihood \((-2\text{LL})\), Akaike Information Criteria \((\text{AIC})\), Bayesian Information Criteria \((\text{BIC})\), and the sample size adjusted Bayesian Information Criteria \((\text{aBIC})\). Additionally, we used emergent growth mixture classes as our outcome of interest and used baseline values of our toxic correlates of traditional masculinity as predictors of class membership. To assess distal outcomes, we used the manual three-step auxiliary BCH approach which uses a pseudo-class Wald's chi-square test to assess all pairwise comparisons for mean differences between classes (Asparouhov & Muthén, 2013). This approach fixes the parameters of latent classes to ensure that the measurement of classes is not also influenced by the covariates.

All models controlled for participant age, race/ethnicity (nonwhite as reference), and mother's education. Missing data ranged from 4% to 25% across the four waves. *Mplus* adjusts for missing data using a maximum likelihood estimator under the assumption that data are missing at random and uses all data available for each participant. We examined missing patterns by our co-variates for all variables used in our models. Because those reporting higher traditional masculinity, dismissiveness of sexual harassment, and dominance values and individuals identifying as nonwhite, and individuals with higher family SES had more missing data, these variables were included in our covariance matrix to aid in accounting for the missing data patterns when using the maximum likelihood estimator. As such, due to the moderate amount of missing data, coupled with the large sample size, and adjusting for potential bias due to missingness on various demographic and individual variables, we believe the missing data likely had a small effect on model estimates.
3. Results

3.1. Hypothesis 1: heterogeneity in willingness to intervene

Model fit results from our GMM are presented in Table 2. When comparing models, we observed the first non-significant VLRT, LMRT, and BLRT values in the four-class solution, suggesting a three-class model best fit the data. We also observed the first increase in BIC and aBIC values within the four-class solution indicating a $k - 1$ class solution fit the data best. While the BIC and aBIC values did not differ much between the two and three-class solutions, we chose the three-class solution for two reasons: 1) the additional class in the three-class solution (compared to the two class solution) added substantive value, and 2) model fit criteria indicated the three class solution fit the data best. Results from the final 3-class model indicated that each class had a random intercept and random linear slope. Fig. 1 presents results from the 3-class WTI GMM. The first class (solid line and square markers), was labeled “stable high,” and represented 70.9% of the sample. Youth in this class trajectory evidenced high (relative to the other emergent classes) WTI throughout middle school. The second class was labeled “decreasing” (demarked with a dashed line and triangle markers) and represented 22% of the sample. Youth in this class reported similar values of WTI in early middle school as those in the stable high class, yet had a steady decline over the next three time points. The third class, labeled “stable low” (demarked by the dotted line and circle markers), represented 7.1% of the sample who reported the lowest values of WTI throughout all of middle school.

3.2. Hypothesis 2: predictors of emergent willingness to intervene classes

Table 3 presents results from our multi-nominal logistic regression model. Because we were interested in what variables predict low levels of willingness to intervene, we used the stable high class as the reference class. For youth in the decreasing WTI class, we found a unit increase in both pro-bullying attitudes and dominance during early middle school was associated with a 55% ($AOR = 1.55, 95\% CI [1.05–2.31]$) and an 11% ($AOR = 1.17, 95\% CI [1.01–1.21]$) increase in the odds of being in the decreasing WTI class compared to the stable high class, respectively. Traditional masculinity, empathy, dismissiveness of sexual harassment and both

![Graph showing growth mixture classes for willingness to intervene during middle school.](image-url)

**Note:** WTI = Willingness to Intervene.

Fig. 1. Final growth mixture classes for willingness to intervene during middle school.
homophobic name calling perpetration and victimization were not significant predictors of membership in the decreasing WTI class.

For youth in the stable low class we found that reporting higher dismissiveness of sexual harassment and engaging in greater homophobic name calling perpetration represented a 16% (AOR = 1.16, 95% CI [1.01–1.34]) increase in the odds of being in the stable low class compared to the stable high class. Further, we found that both homophobic name calling victimization and empathy were associated with a 17% (AOR = 0.82, 95% CI [0.69–0.98]) and 16% (AOR = 0.83, 95% CI [0.70–0.98]) lower odds of being in the stable low class compared to the stable high class. Meaning, youth were less likely to be in the stable low class throughout middle school when reporting higher levels of empathy and greater experiences of homophobic name calling victimization.

Finally, we compared youth in the decreasing WTI class to those in the stable low WTI class. We found that reporting higher homophobic name calling perpetration was associated with a 29% lower odds (AOR = 0.71, 95% CI [0.52, 0.98]) of being in the decreasing WTI class compared to the stable low WTI class.

3.3. Hypothesis 3: mean differences in distal outcomes

To address our final hypothesis, we assessed differences in the features of toxic masculinity across our emergent latent classes of WTI, controlling for baseline values. Table 4 provides means for each class across all of our variables of interest. Briefly, we did not find any differences in dismissiveness of sexual harassment or dominance across our emergent classes. However, we did find that youth in the decreasing WTI class had significantly higher traditional masculinity values ($\chi^2 = 6.02, df = 1, p = 0.01$) compared to youth in the stable high class. We also found that youth in both the decreasing ($\chi^2 = 13.9, df = 1, p < 0.01$) and stable low ($\chi^2 = 5.15, df = 1, p = 0.02$) WTI classes had significantly higher pro-bulling attitudes at the end of middle school compared to youth in the stable high class. Interestingly, youth in the stable low WTI class reported higher engagement in homophobic name calling perpetration ($\chi^2 = 5.89, df = 1, p = 0.02$) compared to youth in the decreasing WTI class. Further, we found that youth in the

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Note: all models controlled for sex, race, and age (not shown for clarity). Above, all odds ratios are in reference to the class with REF following. Bold indicates the confidence interval does not cover 1.

| Table 4 Mean (SE) differences and distal outcomes for features of toxic masculinity. |
|---|---|---|---|---|
| Traditional Masculinity Ideologies | Stable High (1) | Decreasing (2) | Stable Low (3) | Sig Differences |
| **End of Middle School Values** | | | |
| Traditional masculinity | 13.50 (0.14) | 14.60 (0.35) | 13.30 (0.67) | 1 < 2 |
| Dismissiveness of sexual harassment | 21.50 (0.20) | 21.70 (0.53) | 21.90 (0.93) | 2 < 3 |
| Social Dominance | 17.80 (0.26) | 18.10 (0.70) | 16.70 (1.34) | 2 < 3 |
| Pro bullying attitudes | 6.24 (0.08) | 7.28 (0.23) | 7.31 (0.47) | 1 < 2, 3 |
| Homophobic name calling perpetration | 4.50 (0.19) | 3.08 (0.38) | 5.98 (1.04) | 2 < 3 |
| Homophobic name calling victimization | 2.69 (0.14) | 1.03 (0.24) | 1.80 (0.45) | 2, 3 < 1 |
| Empathy | 9.98 (0.17) | 5.31 (0.37) | 8.02 (0.71) | 2, 3 < 1, 2 < 3 |

Note: All models controlled for age, race, and mother's education.

Sig Differences = Equality tests of means across classes using the manual 3-step BCH procedure, posterior probability chi-square tests.

1 = Stable High; 2 = Decreasing; 3 = Stable low.

To interpret the “significant differences” column one simply uses the class numeric labels (1, 2, 3) to understand which class was significantly higher than another class. For example, $1 < 2 =$ Decreasing willingness to intervene is significantly higher than the Stable high class, $3 < 1$ indicates the stable high class is significantly higher than the Stable low, and $2 < 3$ represents a situation where the Stable low class is significantly higher than the Decreasing class. The **absence** of a comparison indicates that no significant differences existed between those classes. Thus, in the column that would have “1 > 2, 1 > 3” this indicates that no differences were found between the Decreasing (2) and the Stable Low Class (3).

“All estimates are adjusted for baseline values for each distal outcome.
stable high class experienced significantly higher levels of homophobic name calling victimization compared to the decreasing ($\chi^2 = 26.3$, $df = 1$, $p < 0.01$) and stable low ($\chi^2 = 4.65$, $df = 1$, $p = 0.04$) classes. Finally, we found that youth in the decreasing WTI class had significantly lower empathy at the end of middle school compared to both the stable high ($\chi^2 = 115.3$, $df = 1$, $p < 0.01$) and stable low ($\chi^2 = 9.83$, $df = 1$, $p < 0.01$) WTI classes.

4. Discussion

Bullying is a consequential public health issue and research on bystander interventions has demonstrated their efficacy in attenuating this behavior (O’Connell et al., 1999). Early adolescence is a time when bullying peaks and willingness to intervene to help victims decreases (Batanova et al., 2014; Espelage et al., 2018a). Willingness to intervene (WTI) is an important sequela to bystander intervention behavior (Nickerson et al., 2014), but is relatively understudied both among adolescent boys and in the context of gender role development and adherence. However, this understanding is critical to intervention design, as adolescent boys are often less likely to intervene due to masculinity norms. The longitudinal design and analyses of this study illuminate the heterogeneity of WTI, trajectories of WTI, predictors of change in WTI, as well as how the toxic correlates of traditional masculinity vary in their influence on trajectories of WTI over time.

Regarding our first hypothesis on the heterogeneity of WTI among boys, growth mixture modeling results suggested that there were three distinct groups – a stable high group, a decreasing group, and a stable low group. Most of this all-boys sample were classified in the stable high group (70%) which indicates that most adolescent boys tend to have high levels of WTI across middle school. There is a paucity of research on the heterogeneity of WTI, but some studies have shown that less than 20% of students engage in bystander intervention behavior (Atlas & Pepler, 1998; Hawkins et al., 2001). Perhaps this disparity suggests that the barrier to intervening for many boys falls beyond initial willingness. In the context of the Theory of Precarious Manhood, this finding suggests that perhaps when individuals are willing to help, an instantaneous tradeoff occurs between preserving masculinity status and helping the victim. Additionally, WTI appears to be relatively stable, as two of the profiles (comprising nearly 80% of the sample) were largely stable over time. However, the decreasing group, which was comprised of 22% of the sample, showed declines in WTI over time. Previous research has suggested that average WTI decrease over time, which aligns with our findings (Batanova et al., 2014; Espelage et al., 2012a). It seems likely, at least for some boys, that the influence of masculinity becomes more important with the physical and psychological development indicated by puberty. Additional results demonstrate the subtleties of this possible association.

The second and third hypotheses assessed how toxic correlates of traditional masculinity, reported during early and late middle school, associate with membership in emergent WTI classes. Results largely supported our hypotheses, but varied as a function of class specification. Regarding early middle school outcomes (see Table 3), higher levels of pro-bullying attitudes and social dominance orientation during early middle school were associated with being in the decreasing WTI class compared to the stable high class. Additionally, reporting higher dismissiveness of sexual harassment as well as engaging in homophobic teasing perpetration, being a victim of homophobic teasing, and lower scores of empathy during early middle school were associated with membership in the stable low class compared to the stable high WTI class. Homophobic teasing perpetration (but not victimization) was the only variable in early middle school associated with higher odds of membership in the stable low class compared to the decreasing WTI class. Traditional masculinity attitudes in early middle school did not significantly predict membership in any specific class. Regarding distal outcomes (see Table 4), students in the decreasing WTI class yielded significantly higher scores on measures of traditional masculinity and pro-bully attitudes, and a lower score on empathy compared to the stable high WTI class. The same pattern of findings emerged between the decreasing class and the stable low class, with the exception of the traditional masculinity score (no significant differences between decreasing and stable low classes). Additionally, the decreasing class evidenced lower mean rates of homophobic bullying perpetration than the stable low class.

Several notable findings are highlighted as follows. First, constructs that are associated with membership in declining WTI class compared to the stable-high class were of particular interest, as both classes yield similar values at Wave 1, after which many students retain this level of WTI, while others decline to match values of those who reported low WTI throughout. Interestingly, the explicit measure of traditionally masculine attitudes was not at all associated with class membership during early middle school, though related attitudinal measures such as social dominance orientation and pro-bully attitudes were predictive of decline. Additionally, the declining class averaged a higher score on the traditional masculinity measure at the end of middle school than the stable high class. Perhaps these findings reflect initial internalizing of foundational components to these attitudes (e.g., obtaining and exercising power over others) that will become more or sexualized as pubertal development continues (Espelage et al., 2012a, 2018b). Alternatively, perhaps students do not explicitly identify with traditional concepts of masculinity, or are aware of the stigma associated with endorsing beliefs suggesting that men are inherently superior to women and other genders. Given that social dominance orientation and pro-bully attitudes highlight the dimension of traditional masculinity that relates to acting aggressively upon social power dynamics, it seems possible that these results point to an implicit embodiment of this facet of traditional masculinity constructs. In other words, perhaps students are endorsing the somewhat more socially acceptable or implicit items that reflect the underpinnings of traditional masculinity (having social power, asserting it aggressively in ways that are harmful to individuals who hold less power). Perhaps they do not consciously endorse the very explicit statements on the traditional masculinity measure and thus answer accordingly, but unconsciously do retain these beliefs, as most people do (Raymond, 2013). This explanation is consistent with studies conducted on awareness of implicit versus explicit biases on sexism and other constructs like racism where admission of bias carries social stigma (Girvan, Deason, & Borgida, 2015; Jost, Pelham, & Carvallo, 2002). Interestingly, the Theory of Precarious Manhood does not address individuals’ level of awareness that the phenomenon is occurring, which invites an exploration of this dimension of the theory.
Regarding empathy, current findings indicated that it was closely associated with WTI generally and over time. This is consistent with findings on bystander intervention behavior (Bellmore et al., 2012; Espelage et al., 2012a; Gini et al., 2007; Van Cleemput et al., 2014). Some researchers conceptualize empathy as a psychological mechanism associated with prosocial behavior (Gini et al., 2007). Empathy, in particular, appears to be one of the more prominent features associated with masculinity norms as well as WTI and is clearly worthy of more thorough investigation within the realm of bystander intervention research.

Finally, the current analyses highlighted the prominent role of homophobic name-calling as a bullying tool. Consistent with hypotheses, students who were consistently unwilling to intervene were the least commonly victimized using homophobic name calling. Students who had been victimized this way were significantly more likely to fall into the stable high WTI class than the stable low. Relatedly, perpetration of this behavior was significantly associated with falling into either the stable low WTI or declining WTI classes compared to the stable high WTI class. Taken together, these analyses highlight how the entanglement of masculinity, heterosexism, homonegativity, and helping behavior on a societal level manifest in microcosms in middle schools in the U.S. The pejorative use of homophobic slurs in bullying illustrates how many students equate non-heterosexual identities with being negative and/or having less power. These beliefs and behaviors persist in middle schools, making them unsafe by marginalizing, oppressing, and violating students of non-heterosexual identities and/or non-traditional gender identification or expression, whether they are the target or a witness. Additionally, the current findings indicate these behaviors are globally associated with willingness to intervene in bullying generally. Interventions should focus on addressing heteronormativity as a harmful component of toxic masculinity.

4.1. Limitations

The present results should be interpreted within the confines of several limitations. First, trade-offs were made in measurement that created limitations. Foremost, gender identity was not assessed. Rather, sex assigned at birth was used as a proxy measure. Though the current research was concerned with WTI among boys, this assessment likely included natal males who do not identify as boys and excluded natal females who do. Also, this study assessed adherence to traditional conceptualizations of masculinity using a fairly brief quantitative measure that did not assess for self-determined, nuanced, or culturally mindful conceptualizations of masculinity. An individual's experience of masculinity as it relates to helping behavior is likely determined by intersections with other cultural identities such as gender, race, ethnicity, ability, religion, age, geographic location, socio-economic status or others. We encourage future research to explore these experiences, and recommend reviewing work that already has (e.g., Brockenbrough, 2018; Bryan, 2019; Rojas-Ashe, Walker, Holmes, & Johnson, 2019). Likewise, empathy is a complex construct that was measured briefly and globally. This choice represents a reasonable tradeoff considering practical concerns related to the larger study (e.g., student fatigue). However, future studies should assess empathy more comprehensively. Specifically, assessments of empathy should be informed by work that identifies and differentiates between the cognitive, affective, and concern dimensions of empathy with attention to precise measurement of each (Coll et al., 2017; Decety, 2015). This is important for informing intervention design as dimensions differentially affect behavioral outcomes and susceptibility to forms of programming (Teding van Berkhout & Malouff, 2016). Furthermore, all of the instruments used in this study are self-report measures. Therefore, the presence of a social desirability bias likely influenced individuals' survey answers to indicate that they were more willing to intervene than they may have felt privately. This phenomenon may account for high membership numbers in the stable-high WTI Class. Additionally, it is fairly well-established that having multiple sources of reports on aggression provides the most robust assessment (Branson & Cornell, 2009). Additionally, the present study did not measure behavioral bystander intervention behavior in addition to a WTI, which diminished the ability to potentially identify mechanisms for shaping behavior.

Finally, regarding analyses, GMM is useful in understanding common trajectories of experiences within a population. However, this method is still limited in capturing richness and specificity in individuals' experiences. While the three class solution fit the current data best, there is still variance in how likely individuals are to fall into the class that they did. This always suggests that there is a wider variety of experiences that this method simplifies. Also, though several odds ratios yielded modest effects, these findings are worthy of attention. Given the number of social-ecological influences interacting with an individual to produce an event, the impact of one will rarely be fully deterministic. Thus, it is important to capture and understand the nuances of a phenomenon. Additionally, in situations where a behavior is binary (e.g., one intervenes or does not intervene), knowing what might make that individual slightly more likely to potentially engage in that prosocial (or antisocial) action is practically useful.

4.2. Applied implications

First, though somewhat contrary to theory, a majority of students in this sample fell into the stable-high class. Should this finding replicate, practitioners should consider ways to highlight and continue to foster this disposition in early adolescent boys. Further, given the wealth of literature associating toxic masculinity with unwillingness to intervene among adult men, utilizing this developmentally formative time to engage in prevention is critical. Because a number of students appear to understand and endorse the concept of general WTI, perhaps this disposition can be leveraged as a basis for discussions or teaching points regarding willingness to intervene in other forms of violence (e.g., sexual harassment, or any form of bias-based aggression).

This overarching goal can and should manifest in various practices. One example is peer-leadership strategies that allow influential students who model this behavior to create a general positive social norm regarding willingness to intervene in bullying scenarios (e.g., Miller et al., 2012; Wyman et al., 2010). To address the development of toxic masculinity specifically, the role of adults in the school community is paramount. Another relates to the modeling role of adults in the school community: Engaging in ongoing conversations with students about gender and sexuality development and stereotypes and utilizing gender-unbiased and
inclusive language (Bigler & Leaper, 2015) are examples of engaging in prevention of toxic masculinity correlates. Should adults not feel competent in these areas, seeking out continuing education related to gender inclusive practices may be useful. Practices that address heteronormativity, patriarchy, and the separation of sex assigned at birth, gender (ones that conceptualize gender as a spectrum) rather than a binary, e.g., the Gender Unicorn (Trans Student Educational Resources, 2014), and sexuality as distinct concepts may be especially useful. Additionally, these themes might also be presented in a more structured format or classroom curriculum (e.g., Coaching Boys into Men; Miller et al., 2012). Additionally, given that low-empathy, especially for dissimilar others, is a common correlate of other forms of aggression (Zych, Baldry, Farrington, & Llorent, 2018) these findings offer evidence to support a concerted effort to build empathy. An emergent finding is the usefulness of virtual reality in building empathy among students as a means of violence reduction (Bertrand, Guegan, Robieux, McCall, & Zenasni, 2018; Ingram et al., 2019).

4.3. Future directions and conclusions

There is a paucity of research that utilizes established theoretical frameworks surrounding masculinity and how these factors predict, disrupt, or facilitate various forms of aggression that occur during adolescence. Much of the extant literature demonstrating the link between masculinity norms and bystander intervention was completed with adults (Carlson, 2008; Kroeper et al., 2014; Leone et al., 2016; Yousaf et al., 2015). Furthermore, research examining deconstructing masculinity in terms of various dimensions and how they associate with aggression and intervention is lacking. The present study offers a useful foundation by demonstrating that WTI and associated masculinity are heterogeneous, relatively stable over time, and are subtle in how they relate to WTI. Future work can build on this foundation by examining WTI and actual bystander intervention behavior over time, by replicating these results with different populations, and examining trajectories across development periods, as opposed to just during middle school. A longer study could potentially illustrate how and why other aspects of masculinity that tend to be more salient during mid-late adolescence (i.e., dismissiveness of sexual harassment) predict WTI and intervening behavior.

Finally, it appears that a majority of younger adolescent boys may have a higher WTI than theory would suggest, and therefore there may be a barrier to translating this willingness to behavior. Polanin et al. (2012) completed a meta-analysis on 12 school-based programs designed to engender bystander intervention behavior. They found that among the sample of 12,874 students, the programs demonstrated low to moderate efficacy in cultivating intervening behaviors, with the largest effects found for high school students. However, they also reported that empathy for peers who were being victimized did not significantly predict bystander intervention. By contrast, the present study indicated that empathy was a strong predictor of WTI. Thus, a barrier may lie in translating this willingness disposition into action. Future work should aim to understand mechanisms of this pathway.

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References


