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Lunningham, J. M., Merrilees, C. E., Taylor, L. K., Goeke-Morey, M., Shirlow, P., Wentz, B., & Cummings, E. M. (2020). Relation between Father Presence, Family Conflict, and Adolescent Adjustment in Northern Ireland. *Child Development*. Advance online publication. <https://doi.org/10.1111/cdev.13446>

Published in:
Child Development

Document Version:
Peer reviewed version

Queen's University Belfast - Research Portal:
[Link to publication record in Queen's University Belfast Research Portal](#)

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Relations among Father Presence, Family Conflict, and Adolescent Adjustment in Northern
Ireland

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Author Note

This research was supported by grants from the National Institute of Child Health and Human Development (R01 HD046933) and the Office of First Minister & Deputy First Minister, Government of Northern Ireland (ID#2110018224) to E. Mark Cummings.

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Abstract

Burgeoning evidence identifies the influence of fathers and, relatedly, fathers in the family context (e.g., family conflict), on adolescent adjustment. However, little is known about the significance of fathers' presence in contexts of environmental risk. In a unique social-political context of economic and sociopolitical adversity, this study examined relations between adolescent adjustment, fathers' presence, and family conflict in families in Belfast, Northern Ireland. Based on responses from 999 adolescents ($M = 12.18$ years; $SD = 1.82$) and their mothers, participating from 2006 to 2012, fathers' presence was linked with reduced internalizing symptoms, and family conflict was related to both internalizing and externalizing problems. The discussion considers the implications for understanding family dynamics related to adolescent adjustment in contexts of environmental adversity.

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Despite increasing attention on the role of fathers in child development (Lamb et al. 1997; 2004; 2010), many questions remain. In particular, the impact of fathers should not be examined independently, but fathers' influence should be considered in the context of multiple levels of the socio-ecological environment (Bronfenbrenner, 1979). Notably, there is substantial evidence that fathers influence child adjustment in contexts of interparental (Cummings, Merrilees, & George, 2010) and family conflict (Cummings, Koss, & Davies, 2015). However, relatively little is known about the father's role in adolescent adjustment, including the significance of father presence on family conflict, and the potential protective influence of fathers in contexts of environmental adversity, such as low socio-economic status (Tamis-LeMonda & McFadden, 2010) and political violence (Cummings et al., 2017). The present manuscript addresses these gaps by examining the impact of fathers on adolescent adjustment in these contexts of environmental adversity, based on six waves of longitudinal data collected on a large sample (i.e., 999) of youths in families exposed to political violence from socially deprived neighborhoods in Belfast, Northern Ireland.

The impact of father presence on adolescent adjustment is a growing area of research. Over the past several decades, the family structures in which adolescents are raised have increasingly diversified (Amato, 2010). Decreasing marriage rates and increasing rates of children born to single mothers have increased the likelihood that adolescents will spend time outside of the "traditional" family structure (i.e., nuclear, two-parent) sometime during their youth in both the United States (Cherlin, 2010; Copen et al., 2012) and the United Kingdom (Social Issues Research Centre [SIRC], 2008). Additionally, cohabitation without marriage is a

much more widely accepted social norm in Western countries; in the U.S., for example, more than 25% of children are expected to live in a cohabiting family during some point in their childhood (Kennedy & Bumpass, 2008). Although 69 percent of American children under age 18 live in families with two parents, 23 percent of children in the U.S. live with a single mother (United States Census Bureau, 2016). In the U.K., 64 percent of children live with their married parents, 15 percent live in cohabitating families, and 21 percent live in single parent households (Knipe, 2017).

Family structure is associated with differences in child and adolescent emotion problems, behavior problems, delinquency, and substance abuse (Amato, 2010; Cavanagh, 2008; Manning & Lamb, 2003). Single parenthood is linked with risk factors for child and adolescent maladjustment (Amato, 2010; Bachman et al., 2012; Cavanagh, 2008; Manning & Lamb, 2003). Relatedly, father absence has been identified as a contributing factor to adolescent adjustment problems (Carlson, 2006; Lamb, 2010; Mason et al., 1994; Booth et al., 2010). For example, Mason et al. (1994) examined the effects of father absence and the quality of the mother-adolescent relationship on adolescent problem behavior. Father absence moderated the risk of peer problem behavior; however, a positive mother-adolescent relationship served as a protective factor against this risk (Mason et al., 1994). Based on the National Longitudinal Study of Adolescent Health, Booth et al. (2010) examined the effects of father absence and presence with closeness of the father-adolescent relationship on adolescent outcomes. Adolescents who were emotionally close to their nonresident fathers reported higher self-esteem, less delinquency, and fewer depressive symptoms than adolescents who lived with a father with whom they were not close (Booth et al, 2010). Adolescents living with a father with whom they were not close had better grades and engaged in less substance use than those having a nonresident father with

whom they were not close. The best overall adolescent outcomes were associated with having close relationships with present fathers.

There is a growing consensus on the impact fathers have on adolescent development (Lamb, 2010). The impact of fathers on child and adolescent adjustment is also documented in the context of interparental conflict (Cummings, Merrilees, & George, 2010; Cummings, Goeke-Morey, & Raymond, 2004). Broadly, family conflict has been linked with adolescent adjustment problems (Cummings, Koss, & Davies, 2015). Marital and family conflict are salient aspects of the quality of the family environment for adolescent adjustment across a wide range of ages and settings (Cummings & Davies, 2010). For example, Amato & Keith (1991) conducted a meta-analysis which implicated parental absence as a factor in child outcomes, yet the most consistent support was found for a family conflict perspective, which posits that conflict between parents before and during separation is a critical stressor for children, and such hostility among parents leads to an aversive home environment in which children experience stress and insecurity. Family conflict may be different among two-parent families, single parent families, and families that experience marital transitions. According to the Fathering Vulnerability Hypothesis (Cummings et al., 2004; 2010), father-child relationships may be more negatively affected by interparental conflict than mother-child relationships.

Despite the increased attention on fathers, relatively little is known about the significance of father presence and family conflict on adolescent well-being in contexts of high environmental adversity. In the present study, which focuses on families with adolescents in socially deprived neighborhoods in Belfast, Northern Ireland, families were faced simultaneously with two types of environmental adversity: low family income and exposure to political conflict. Therefore, these families provided a cogent test of the significance of fathers' role in contexts of

substantial environmental adversity. Notably, the focus in sample selection in this research was on families with preadolescent and adolescent youth (ranging from ages 8-17, $M = 12$) since this demographic was posited to be most directly exposed to political conflict and more likely to contribute as actors over time to the intergenerational transmission of sectarian violence. The context of political conflict in Belfast between 2006 and 2012 provided a unique setting for studying the effects of political conflict as a form of environmental adversity on youth's adjustment. Although the roots of this conflict can be traced back for centuries, the most recent concerns focus on the 30-year period (1968-1998) of conflict and violence known as the Troubles and its ongoing aftermath, in which Nationalists or Republicans (typically Catholics) contended for unification with the Republic of Ireland and Unionists or Loyalists (typically Protestants) argued to remain part of the United Kingdom. Although the Troubles were formally resolved through the 1998 Belfast Agreement, sectarian conflict remains a salient part of the social ecology. Many neighborhoods and schools in Belfast remain highly segregated by ethnicity (i.e., Protestant or Catholic), and there were thousands of sectarian-motivated crimes and incidents reported to Northern Ireland police annually during the period of this study (Police Service of Northern Ireland, 2019). Thus, despite the formal peace accord, sectarianism remains a source of environmental adversity for youth growing up in Belfast.

With regard to developmental considerations, adolescents in the age span of this study are not merely passive victims of sectarianism, but may be active participants, for example, in protests, rioting, and other forms of violence (McEvoy-Levy, 2006; Northern Ireland Riots, 2011). Moreover, in Northern Ireland in the period of this study, as paramilitary organizations were disbanded, the evidence indicates that adolescence have enhanced likelihood of involvement in sectarian conflicts. That is, young people, unaffiliated with such organizations,

have evidenced increased activity in sectarian rioting and crime (Haydon & Scraton, 2008; Shirlow & McEvoy, 2008). For example, a study by McAloney et al. (2009) indicated that over three quarters of adolescents (15-16 year olds) in Belfast in this period had experienced violence in their communities reflecting a social and psychological legacy of the Troubles.

Problems for youth associated with political violence and armed conflict have been identified worldwide (Cummings et al., 2017). Moreover, links are reported between environmental adversity associated with political violence and armed conflict, family processes and psychopathology in adolescence. For example, supportive, non-punitive parenting has been associated with youth adjustment whereas inconsistent parenting and psychological control has been related to higher levels of psychological symptoms (Kerestes, 2006; Punamaki et al., 2001). Family cohesion has been linked with youth adjustment whereas family conflict is associated with youth maladjustment (Laor et al., 2001). In longitudinal studies, family processes have been repeatedly identified as predictors of youth adjustment in contexts of political violence and armed conflict (e.g., Betancourt et al., 2013; 2015; Panter-Brick et al., 2011). Thus, the literature indicates that the study of relations between these elements of environmental adversity, family processes, and youth adjustment holds promise for may improve understanding youth adjustment in across multiple contexts of political violence and armed conflict.

The present study tests whether family conflict in the context of father presence or absence is associated with adolescents' internalizing or externalizing problems. Research has not taken advantage of the opportunity to explore both within- and between-family effects, which has the potential to advance better understanding of the impact of these family processes on adolescents' socioemotional functioning (Curran & Bauer, 2011). This study examines both within- and between-family effects related to the impact of father absence and family conflict on

adolescent adjustment. Between-person effects assess whether youth experiencing father absence or higher levels of family conflict are more likely to develop adjustment problems than youth experiencing father presence or lower levels of family conflict. Thus, between-person analyses make comparisons across the sample. In contrast, within-person tests allow for detection of how change occurs relative to that individual's own baseline measures. Approaches that model individual or within person changes over time inform person-oriented conceptualizations of change (Nesselroade & Molenaar, 2010; Sterba & Bauer, 2010). The multi-level modeling approach we used applied to a six-wave longitudinal study supports insights into these different processes. Over the many waves of data collection, family structure varied, with father presence included as a time-varying predictor. This approach allowed us to account for the impact of father presence even as some families underwent transitions. Family conflict was also included as a time-varying covariate predicting adjustment outcomes. Finally, adolescent gender was included as a covariate because differences between boys and girls in internalizing and externalizing symptoms are frequently reported (Cummings et al., 2013; Davies & Lindsay, 2004; Taylor et al., 2016). Based on an extensive body of research (Cummings & Davies, 2010; Cummings et al., 2015; Tamis-LeMonda & McFadden, 2010), we hypothesize that father presence will be linked with reduced adjustment problems and that family conflict will be associated with elevated internalizing and externalizing problems.

Method

Participants

The data come from a 6-year longitudinal survey of mother-adolescent dyads in Belfast, Northern Ireland. Mothers and one adolescent from the family were surveyed annually. For households with more than one child, the youngest child eligible for participating was selected.

This allowed the maximum amount of time families could be followed before a child left home. About half of the participating adolescents had older siblings, whereas the other adolescents were eldest or only children in the family. At time 1 of data collection, 695 dyads were surveyed; a supplemental sample was added at time 3, so that the total number of unique family dyads across the six years totaled 999. Mothers were selected instead of fathers because many households in working-class Belfast are headed by single mothers, and mothers are more likely to be available for in-home surveys. Our sample was exclusively White, consistent with the Northern Irish population of ethnic Catholics and Protestants. At time 1, the adolescent ages ranged from 8-17 ($M = 12.18$, $SD = 1.82$). The means and standard deviations of age for each time point are displayed in table 1. The adolescent gender distribution for the total sample is approximately 48% male and 52% female.

A characteristic of this particular community sample is that participants who miss a wave of data collection do not necessarily drop out of the study entirely, but return for a later wave of the study. Between any two time points, approximately 80% of the families returned across the 6 waves of the study, a rate of retention that compares well to comparable high-risk, longitudinal samples, with retention rates in these studies ranging from 50% to 86% (e.g., Betancourt et al., 2010; Kronenberg et al., 2010). Moreover, including participants from any previous wave, 78% returned at wave 2, 85% at wave 3, 76% at wave 4, 94% at wave 5, and 101% at wave 6.

The selection of neighborhoods was informed by analyses of representative neighborhoods and family structures by an expert demographer on the ethnic composition of Belfast. Families for this study were selected using stratified random sampling across 18 socially deprived areas of Belfast. This process was designed to ensure proportional sampling of families within Protestant and Catholic areas similar in terms of socioeconomic status and at risk for

sectarian violence due to proximity to the opposing community. Approximately 35 families were randomly selected from specific wards (i.e., neighborhoods) in Belfast with homogenous ethnic groupings (over 90% Protestant or over 90% Catholic). Our sample was representative of the overall population in Belfast (43% Catholic, 57% Protestant; Darby, 2001). The Belfast communities in this study were all highly segregated by ethnicity, such that residing in a Catholic or Protestant neighborhood was tantamount to being Catholic or Protestant, respectively. Additionally, the demographer also considered the spatial location of interface “peace” walls, as families living in communities adjoining an interface are likely to experience higher levels of violence compared to families in communities separated by buffer zones. All of the study areas had at least one boundary between it and a community of the other ethnicity. Moreover, the demographer selected neighborhoods in the survey with the goal of limiting differences in socioeconomic status. All neighborhoods selected were in areas associated with the Troubles in Northern Ireland and were in the bottom 20th percentile in a social deprivation measure calculated by neighborhood in Northern Ireland (Cummings, Schermerhorn et al., 2010).

Measures

Family structure and father presence. Family structure and father presence was determined by reported maternal marital status. Mothers were asked to report their marital status as “married”, “cohabitating”, “separated”, “divorced”, or “single (never married)”. Based on these responses, families were determined to be single-parent or “coupled” (either married or cohabiting) at each wave across the study. When marital status was not reported, observations were excluded from the analysis. Table 2 shows numbers for single-parent families and father-present families at each time point.

Internalizing and externalizing symptoms. Adolescents completed the Strengths and Difficulties Questionnaire (SDQ), which contains subscales for emotion problems, peer issues, conduct problems, and hyperactive behaviors (Goodman, 1997). Each subscale contained five items. Adolescents responded to each item with 0 (*not true*), 1 (*somewhat true*), or 2 (*certainly true*). Example items include “I am often unhappy, down-hearted, or tearful” (internalizing) and “I get very angry and often lose my temper” (externalizing). The SDQ has well-established use among community samples in the UK (Goodman & Scott, 1999). The emotion and peer subscales can be combined to assess internalizing symptoms and the conduct and hyperactivity subscales can be combined to assess externalizing symptoms (Goodman et al., 2010). For internalizing and externalizing scores, each 0 to 2 answer was summed, so that internalizing and externalizing scores ranged from 0 to 20. The items for the internalizing scale had an average reliability (measured by Cronbach’s α) of 0.62 across all data collections ($SD = 0.02$). For internalizing symptomatology, the reliability coefficient for wave 1 was 0.61, 0.60 for wave 2, 0.57 for wave 3, 0.62 for waves 4 and 5, and 0.59 for wave 6. The items for the externalizing scale had average reliability of 0.69 ($SD = 0.02$). For externalizing symptomatology, the reliability coefficient for wave 1 was 0.70, 0.68 for waves 2 through 5, and 0.61 for wave 6. Although relatively low internal consistencies for the subscales of the SDQ are reported (Palmieri & Smith, 2007), the aim in scale construction was choosing items to maximize clinical significance as well as statistical consistency. Consistent with these goals, Goodman and Scott (1999) report the SDQ subscales correlated more highly with interview-based ratings of clinical symptoms compared to the CBCL, and discriminated between high risk and low risk samples, further supporting criterion validity. Table 3 displays means and standard deviations at each age.

Family conflict. Adolescents reported their perceived level of family conflict by completing the Family Environment Scale (FES) – Conflict subscale (Moos & Moos, 1986). The FES conflict subscale is a 9-item true-false survey that assesses the extent to which conflict is frequent and/or intense in the family. Sample items include “we fight a lot in our family” and “people in my family sometimes hit each other.” Answers were scored as 0 for false and 1 for true, with a possible scale range from 0-9. The 9 items for the FES Conflict subscale displayed an average α coefficient of 0.62 across all measurement occasions ($SD = 0.07$). Table 3 displays FES scores and standard deviations across age.

Procedure

Families were surveyed in the late spring from 2006 to 2012. Data were collected through in-home interviews conducted by an established survey company based in Northern Ireland with considerable experience working in the Belfast community. Interviewers were accredited under the Interviewer Quality Control Scheme and registered under the Data Protection Act. Interviewers surveyed mothers and adolescents, which lasted approximately 1 hour and 30 minutes, respectively. Research protocol and measures were approved by all Institutional Review Boards at all participating universities. Families participating in the study were given monetary compensation for their time. Families received £20 for participation at times 1 and 2, £40 at times 3 and 4, and £50 at times 5 and 6.

Analytic Rationale

Multilevel modeling was used to model longitudinal trajectories of adolescent adjustment. Multilevel modeling was chosen because it permits a flexible specification of the timing variable in the longitudinal model. Due to variation in the ages of adolescents across

measurement occasions, adjustment trajectories were modeled over the range of all participants' ages, rather than modeling trajectories across specific measurement occasions.

Multilevel modeling also allowed for time-varying and time-invariant predictors to be included in the models. Father presence was included as a binary time-varying predictor, so that adolescents were not fixed in single-parent or two-parent families but could change between the family types over time. Family conflict was included following the approach by Hoffman and Stawski (2009) to disaggregate the within- and between-person effects of family conflict. Consistent with this approach, relations between family conflict and adolescent adjustment were assessed in terms of (1) between-person effects, that is, comparisons of levels of conflict across families (e.g., families with consistently high levels of conflict vs. low levels of conflict across the study); and (2) within-person effects, comparisons of levels of conflict over different ages in the study for individual adolescents (e.g., a specific adolescent reports low levels of conflict at age 12 and high levels at age 16). The disaggregation approach isolates the effect of different conflict levels across families and the effect of change in conflict within families. First, mean levels of family conflict across all measurement occasions (referred to as each individual's person-mean) were calculated for each adolescent. Second, time-varying scores were determined for each adolescent by centering their scores over time around their person-mean. The centered family conflict values provided an indication of the current level of family conflict relative to *each individual's* average level of family conflict. The person-mean levels of family conflict (PM family conflict) indicated each family's average level of conflict for the study. The interaction of father presence with both sources of variability in family conflict was included to test for moderation effects. Finally, adolescent gender was included as a covariate because differences between boys and girls in internalizing and externalizing symptoms are frequently

reported (Cummings et al., 2013; Davies & Lindsay, 2004; Taylor et al., 2016). Analyses were carried out with SAS PROC MIXED using full information maximum-likelihood estimation to handle missing data.

Unconditional Models

Models of symptom trajectories without covariates were fitted as a first step.

Unconditional growth models of intercept-only, linear change across age, and quadratic change across age were fitted for both internalizing and externalizing symptoms. These models established the type of growth trajectory used in the conditional modeling.

Conditional Models

A series of conditional models were fitted in step-wise fashion to evaluate the hypothesized predictors. This same series of models was carried out with internalizing scores and externalizing scores as the outcome variable. The first conditional model, labeled Model A, was a linear growth model across age with gender included as a level-2 covariate, with random effects included for both the intercept and the age slope. Model B added the main effect of father presence. Model C added a father presence by age interaction term to see if adolescents with and without fathers in the home had different average trajectories of symptoms. Model D added the effects of both within- and between-person family conflict. Model E tested for moderation effects of father presence on the impact of family conflict on adjustment outcomes. This was accomplished by including interaction terms between father presence and both within- and between-person variables of family conflict. Model F no longer included the moderation interaction terms, but allowed for random effects of within-person family conflict. This variance component assesses whether there were individual differences in how fluctuating conflict scores

over time impacted individual adolescents. Models in which both random effects of family conflict and interaction effects were estimated did not converge. The final model has the form:

Level 1:

$$y_{ij} = \beta_{0i} + \beta_{1i}(Age_{ij} - 8) + \beta_{2i}(Father_{ij}) + \beta_{3i}(famconflict_{ij} - PMfamconflict_i) + \varepsilon_{ij}$$

$$var(\varepsilon_{ij}) = \sigma_\varepsilon^2$$

Level 2:

$$\beta_{0i} = \gamma_{00} + \gamma_{01}(Gender_i) + \gamma_{02}(PMfamconflict_i) + \zeta_{0i}$$

$$\beta_{1i} = \gamma_{10} + \zeta_{1i}$$

$$\beta_{2i} = \gamma_{20}$$

$$\beta_{3i} = \gamma_{30} + \zeta_{2i}$$

$$\begin{pmatrix} \zeta_{0i} \\ \zeta_{1i} \\ \zeta_{2i} \end{pmatrix} \sim N \left(\begin{pmatrix} 0 \\ 0 \\ 0 \end{pmatrix}, \begin{pmatrix} \sigma_{0^2} & \sigma_{01} & \sigma_{02} \\ \sigma_{10} & \sigma_{1^2} & \sigma_{12} \\ \sigma_{20} & \sigma_{21} & \sigma_{2^2} \end{pmatrix} \right)$$

where y_{ij} represents internalizing or externalizing symptoms for person i at age j , the β_i 's are level 1 regression coefficients, ε is the residual term, γ represents level 2 coefficients, and ζ represents the random effect around the level 1 coefficients. In this model, the variances and covariances of the random effects were unstructured, as seen in the covariance matrix of ζ .

Results

Figures 1 and 2 display average rates of externalizing and internalizing symptoms by father presence. The graphs supported the use of a linear trajectory, with symptoms decreasing on average over time. For adolescent internalizing symptoms, there was a visible gap between father presence and father absence. However, this difference was not observed for externalizing symptoms. Table 4 displays the estimates and fit statistics for the unconditional models. The linear models fit better than the intercept only models based on χ^2 difference tests of the -2 Log

Likelihood (LL) of the models. The quadratic models did not fit significantly better than the linear models. Therefore, linear growth was fitted in the conditional models with predictor variables.

Internalizing symptoms. Table 5 presents the results of all models and model comparisons when predicting internalizing symptoms. Model F was shown to be the best model overall according to sequential χ^2 difference tests ($\Delta\chi^2(3) = 10.7, p < 0.05$ compared to the next-best fitting model, see Table 5). This model included main effects of age, father presence, within-family levels of conflict, between-family levels of conflict, and gender. Additionally, the model included a random intercept, random slope for age, and random slope for within-family conflict.

In this final model, adolescents showed an average linear decline in internalizing symptoms over adolescence, $\gamma_{10} = -0.148, p < 0.001$, indicating a slight decrease in symptoms with each year. The random effect component for age was not significant, $\sigma_1^2 = 0.021, ns$, indicating that the trajectory of symptoms was fairly stable across adolescents as they get older, given the other variables in the model. Father presence had a main effect on internalizing symptoms of $\gamma_{20} = -0.344, p < 0.01$, meaning that at any given age, father presence in the home predicted fewer internalizing symptoms, accounting for gender, age, and family conflict. At timepoints when families had more conflict compared to their average, youth reported higher internalizing symptoms, $\gamma_{40} = 0.182, p < 0.001$ (the within-family conflict variable). The random slope component of current levels of family conflict was small but significant, $\sigma_2^2 = 0.096, p < 0.01$. This indicated that there were individual differences across adolescents in terms of how the relative levels of conflict in their families impacted their internalizing symptoms. Between-family levels of family conflict also predicted more internalizing symptoms, $\gamma_{02} = 0.242, p <$

0.001, meaning adolescents from families with more conflict on average reported higher rates of internalizing symptoms compared to those from families with less conflict. Additionally, there were no significant differences in internalizing symptoms across gender in any of the models. Compared to baseline Model A, Model F indicates an (approximate) R^2 increase at level 1 of 0.04 and at level 2 of 0.07 (see Bryk & Raudenbush, 1992).

Externalizing symptoms. Table 6 presents all model results and model comparison statistics for externalizing symptoms. Model F was also found to be the best model overall according to -2LL fit statistics, $\Delta\chi^2(3) = 47.4, p < 0.001$. In this model, girls reported fewer externalizing symptoms on average, $\gamma_{01} = -0.788, p < 0.001$. Adolescents showed an average linear decline in externalizing symptoms over adolescence, $\gamma_{10} = -0.172, p < 0.001$, indicating that adolescents decreased slightly in symptoms with each year after controlling for the other covariates. The variance component for the rate of change was not significant, $\sigma_1^2 = 0.024, ns$, indicating that there were not significant individual differences in the rate of change for externalizing symptoms.

The main effect of father presence on externalizing symptoms was marginal and not significant, $\gamma_{20} = -0.191, ns$. Within-person levels of family conflict, relative to one's average level of family conflict, were associated with increased externalizing symptoms, $\gamma_{40} = 0.386, p < 0.001$. There were again significant individual differences in the effect of changes in within-family levels of conflict, indicated by a significant variance component for the within-family conflict slope, $\sigma_2^2 = 0.205, p < 0.001$. Average levels of between-family conflict also predicted increased externalizing symptoms, $\gamma_{02} = 0.553, p < 0.001$, so that adolescents from families with more conflict on average reported higher rates of externalizing symptoms. Compared to baseline Model A, Model F indicates an (approximate) R^2 increase at level 1 of 0.13, but level 2 R^2

change is -0.0009 when adding the additional random slope for family conflict estimates (Snijders & Bosker, 1994, elaborate on negative values for approximate multi-level R^2).

Discussion

Results of the current study contribute to the body of work on the impact of fathers' presence, as well as the effects of family conflict, on adolescent adjustment in contexts of environmental adversity. Father presence in the home was linked with reduced internalizing symptoms, whereas family conflict was related to both elevated internalizing and externalizing problems.

These results thus support the importance of the father's role in adolescent adjustment in adverse contexts, particularly adolescents from low income families in communities marked by social deprivation and political violence. Father presence predicted fewer internalizing symptoms at any given age across adolescence, but father presence was not associated with reduced externalizing symptoms. These findings are consistent with reviews supporting the importance of father presence to youth adjustment. For example, based on their review, Tamis-LeMonda and McFadden (2010) argued that there are "countless empirical studies that show children who experience absent fathers are more likely to confront an array of risks that compromise their well-being...and the idea that fathers matter only in certain economic contexts and that economic context rather than fathers per se matter are equally flawed" (p. 301). Similarly, Panter-Brick et al. (201) contended that "when it comes to fathers, our knowledge on empirical associations between fathers' involvement in raising children and the health and educational outcomes of children is quite consistent – fathers have a substantial impact on child development and well-being" (p. 1191). The present findings thus reinforce findings supporting the importance of father presence in contexts of low-income families and environmental adversity.

Family conflict predicted higher symptoms of both types of adjustment problems. However, father presence did *not* moderate the effects of family conflict on either internalizing or externalizing symptoms. Thus, addressing a question of limited past research, these findings indicated that the presence of a father did not mitigate or exacerbate the effects of family conflict. One interpretation is that father presence, perhaps especially in contexts of social deprivation in the family or political violence (i.e., the Troubles), adds to adolescents' emotional security in the family, thereby reducing the likelihood of adolescent internalizing problems. Consistent with this interpretation, Cummings, Koss, and Davies (2015) reported that emotional security in adolescence was related to a subsequently reduced likelihood of adjustment problems.

In addition, the present study differentiated the effects of conflict between families and over time within families. The significant within-family effect indicated that family conflict contributed to changes in symptoms over time for a given adolescent. That is, current levels of family conflict, relative to one's average levels of conflict, were associated with increased higher symptoms of internalizing and externalizing problems. The significant between-family effects indicated individual differences among adolescents in problem behaviors were in part attributable to differences across adolescents in their levels of family conflict. Adolescents from families with higher average levels of family conflict reported more internalizing and externalizing symptoms, as expected.

The results underscored the negative impact of family conflict on adolescent adjustment, viewed in terms of both within- and between-family patterns of influence. However, although an extensive body of research has supported the impact of *marital* conflict (Cummings & Davies, 2010), the present research studied the negative effects of *family* conflict on adolescent adjustment across numerous family structures (i.e., single parents, married, cohabiting, divorced,

never married). Thus, the findings may have broader implications regarding the significance of conflict in families than results for marital conflict because family conflict is more pervasive, involving a wider range of family forms.

Given the high proportion of single parent families in these neighborhoods in Northern Ireland (Cummings, Schermerhorn, et al., 2010), the current study represented a unique opportunity to examine the role of father's presence and family conflict on adolescent adjustment in the context of significant political conflict. Additionally, families in the current study were selected among low income wards in Belfast, operationalized as wards identified as the top most socially deprived on the Multiple Deprivation Index derived by the Northern Ireland Statistics and Research Agency (NISRA, 2011). Evidence suggests that father absence may exacerbate adjustment risk factors for youth in lower income families (Tamis-LeMonda & McFadden, 2010). Furthermore, the effects of father presence and family conflict in adverse environments fit into a theoretical framework elucidating the impact of a politically violent social ecology on child adjustment that was posited by Cummings et al. (2009), based on Bronfenbrenner's (1979) ecological-transactional model. In terms of this conceptual framework, father presence and family conflict are elements of an adolescent's microsystem, with environmental adversity (low income, political violence) reflecting additional influences of the social ecology on youth ontogeny (see Figure 1, Cummings et al., 2009). Moreover, the general ecological-transactional model, applied here to sectarian conflict in Northern Ireland, could potentially be extended to low-income communities in the US that experience ethnic or classist conflicts, providing a lens to better understand families in these communities (Cummings et al., 2009).

This research raises additional directions for research on father presence and family functioning. Notably, recent reviews call attention to the misconceptions about the lack of

importance of fathers, limitations in developmental research on fathering and the significant lack of engagement of fathers in parenting programs (Panter-Brick et al. 2017; Tamis-LeMonda & McFadden, 2010). For example, an important direction to consider is the effect of family instability itself on adolescent internalizing and externalizing symptoms. Family stability is certainly associated with consistent father presence, but is also a distinct construct from father presence alone. Numerous past studies have indicated that family instability may contribute to child and adolescent difficulties above and beyond the impact of family structure. Although legal marriage among biological parents has been associated with the highest level of child well-being, evidence suggests that family stability may be protective even when adolescents are living within non-traditional family structures (Bachman et al., 2012). Stable, non-disrupted single parenting has been shown to be less detrimental to adolescent well-being than exposure to multiple family transitions, further demonstrating the importance of family stability for child development (Demo & Acock, 1996). Moreover, Bachman et al. (2012) investigated the association of family structure and maternal partnership instability with adolescents' well-being among urban low-income families and found that adolescents of established married parents displayed less delinquency and externalizing problems, according to both adolescent and mother reports, than peers in single-parent or newly married households. Similarly, Brown (2006) examined the influence of parental marital and cohabitation transitions on adolescent delinquency, depression, and school engagement, and found that adolescents who experienced a family transition reported decreased well-being, on average, relative to those in stable, two-biological-parent families. One might hypothesize that family instability and family conflict would be positively associated; thus, our results would support the hypothesis that instability has a negative impact on adolescent

adjustment. Future studies should examine the impact of instability, family conflict, and the interaction of the two on children's well-being.

Another important future direction for family research is to consider other definitions of family structure beyond father presence or absence. The current study attempted to capture family diversity by including father presence, not legal marital status, as the indicator of family structure. Furthermore, researchers are encouraged to explore how family processes may be different across family structures. Understanding family processes is crucial for identifying characteristics of high-functioning families and well-adjusted adolescents across diverse family structure types. Research questions of this kind may have potentially profound implications for understanding the influence of the multiple dimensions of family functioning on adjustment across both childhood and adolescence.

Developmental change also merits comment. Adolescents showed a decrease in externalizing symptoms over adolescence, indicating that adolescents showed a slight decrease in externalizing symptoms with each year across the period of adolescence and preadolescence. However, the variance component for the rate of change did not reach significance; thus, there were not significant individual differences in the rate of change for externalizing symptoms. Adolescents also showed a slight linear decline in internalizing symptoms over adolescence even when accounting for the other predictors of adolescent symptoms. Father presence did not moderate the impact of age on declining symptoms, meaning that the small decline was consistent for father-present and father-absent families. Adolescents tended to report fewer symptoms as they matured, regardless of conflict or father impacts. The decline in adjustment problems over time for this age range is consistent with research in other contexts involving high risk environments. For example, children's age was found to be negatively correlated with

adjustment problems in urban areas of East London across an age range of 8 to 15 year-olds (Fagg et al., 2008).

Limitations. First, results are based on questionnaire assessments; the addition of observational data and father-reported responses would add cogency to the tests. Second, most children were preadolescents and adolescents. Future research should also examine these relations among younger children. Third, adolescents reported on both family conflict and adolescent adjustment, which might partly account for the association between conflict and adjustment. Finally, another limitation are low internal consistencies in assessment of youth adjustment problems. However, relatively low internal consistencies are typically reported for the widely used SDQ subscales, this also reflects the aim in scale construction to maximize clinical significance (Palmieri & Smith, 2007). Although a limitation in terms statistical consistency, this emphasis also holds benefits over other scales (e.g., the CBCL) for the prediction of youth adjustment problems (Goodman & Scott, 1999).

Conclusions. Finally, the findings support the significance of father presence and family conflict in contexts of environmental adversity. Notably, the socioecological context of relative social deprivation and historical political violence in Belfast may have increased the potential importance of father presence for child adjustment. Father presence was associated with reduced internalizing problems, consistent with the notion that father presence may support adolescence's emotional security and reduce the risk for these problems in adolescence (Cummings et al., 2015). However, family conflict emerged as an even more pervasive predictor of adolescent adjustment problems, associated with both internalizing and externalizing symptoms in adolescents. The findings thus call attention to the significance of family processes to child adjustment in contexts of high environmental adversity (e.g., political violence), calling attention

to the promise of intervening at the level of family factors (e.g, interventions to reduce conflict) for youth in these environments (Cummings & Miller-Graff, 2015).

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Tables and Figures

Table 1

Descriptive statistics for adolescent age at each measurement occasion in the study.

Time	<i>N</i>	<i>M</i>	<i>SD</i>
1	695	12.18	1.82
2	572	13.24	1.83
3	770	13.61	1.99
4	631	14.66	1.96
5	593	15.75	1.97
6	590	16.83	1.99

Table 2

Frequency of single-parent and two-parent families as reported by father presence or absence in the household across age.

Age	Father Absent	Father Present	Total Observations
8	2	2	4
9	17	10	27
10	142	71	213
11	208	106	314
12	271	151	422
13	332	174	506
14	381	196	577
15	384	205	589
16	300	153	453
17	211	106	317
18	145	73	218
19	102	45	147
20	45	15	60
21	0	1	1
Total	2540	1308	3848

Table 3

Descriptive statistics for adolescent adjustment and family conflict scores across adolescence.

Age	Internalizing		Externalizing		Family Conflict	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
8	1.00	1.15	6.25	4.03	2.25	1.26
9	5.58	4.83	7.30	3.70	2.11	1.91
10	4.42	2.99	5.92	3.25	2.79	2.25
11	4.44	3.17	5.76	3.57	2.86	2.09
12	4.58	3.09	5.47	3.37	2.99	2.20
13	4.40	2.98	5.49	3.22	3.06	2.06
14	4.17	2.88	5.63	3.56	3.03	2.10
15	4.18	2.68	5.54	3.41	3.00	1.95
16	4.12	2.66	5.53	3.23	2.83	1.98
17	4.14	2.70	5.24	3.22	2.94	1.89
18	3.81	2.26	4.87	2.89	2.81	1.67
19	3.61	2.43	4.82	2.90	2.79	1.57
20	3.38	1.63	4.67	2.46	2.68	1.44

Table 4

Unconditional models for adolescent internalizing and externalizing symptoms.

	Intercept Only Model	Linear Model	Quadratic Model
<u>Internalizing</u>			
Fixed effects			
Intercept	4.141***	4.913***	4.796***
Age		-.120***	-.079
Age ²			-.003
Random Effects			
σ_{ε}^2	7.058***	6.860***	6.863***
σ_0^2	1.136***	3.000***	2.945***
σ_1^2		.011 [†]	.011 [†]
σ_{01}		-.171*	-.165*
-2Log Likelihood	18611.9	18567.6	18467.4
	Intercept Only Model	Linear Model	Quadratic Model
<u>Externalizing</u>			
Fixed effects			
Intercept	5.335***	6.288***	6.374***
Age		-.152***	-.183*
Age ²			.002
Random Effects			
σ_{ε}^2	7.997***	7.763***	7.761***
σ_0^2	3.460***	5.200***	5.232***
σ_1^2		.026*	.026*
σ_{01}		-.217*	-.220*
-2Log Likelihood	19550.1	19502.8	19502.6

*** $p < .001$. ** $p < .01$. * $p < .05$. [†] $p < .1$.

Table 5

Models predicting adolescent internalizing. Model F is the best fitting model, which specifies a linear trend of age, a main effect of father presence at any given age, a main effect of current levels of family conflict, and a main effect of high-conflict families.

	Parameter	Model A	Model B	Model C	Model D	Model E	Model F
Fixed Effects							
Intercept	γ_{00}	5.133***	5.262***	5.331***	4.391***	4.214***	4.422***
Age	γ_{10}	-.160***	-.163***	-.173***	-.145***	-.144***	-.148***
Father	γ_{20}		-.335**	-.545 [†]	-.350**	.093	-.344**
Father by Age	γ_{30}			.031			
Family conflict	γ_{40}				.179***	.169***	.182***
PM fam-conflict	γ_{02}				.244***	.301***	.242***
Family conflict*father	γ_{60}					.027	
PM fam-conflict*father	γ_{70}					-.155 [†]	
Gender	γ_{01}	.104	.107	.107	.193	.196	.181
Random effects							
Level-1 Within-person	σ_{ε}^2	5.627***	5.622***	5.625***	5.694***	5.690***	5.425***
Level-2 Intercept	σ_0^2	4.463***	4.387***	4.343***	3.945***	3.800***	4.164***
Age	σ_1^2	.020	.021	.020	.021	.020	.021
Family conflict	σ_2^2						.096**
Goodness of Fit							
-2LogLikelihood		14234.0	14226.5	14226.0	13316.4	13313.3	13305.7
AIC		14248.0	14242.5	14244.0	13336.4	13337.3	13331.7
BIC		14279.8	14278.8	14284.9	13381.9	13391.8	13390.8

*** $p < .001$. ** $p < .01$. * $p < .05$. [†] $p < .1$. Model F compared to Model D: $\Delta\chi^2(3) = 10.7, p < .05$.

Table 6

Models predicting adolescent externalizing. Model F is the best fitting model, which specifies a linear trend of age, a main effect of father presence at any given age, a main effect of current levels of family conflict, and a main effect of high-conflict families.

	Parameter	Model A	Model B	Model C	Model D	Model E	Model F
Fixed Effects							
Intercept	γ_{00}	7.053***	7.131***	7.178***	5.237***	5.060***	5.313***
Age	γ_{10}	-.187***	-.189***	-.196***	-.165***	-.164***	-.172***
Father	γ_{20}		-.196	-.338	-.183	.263	-.191
Father by Age	γ_{30}			.022			
Family conflict	γ_{40}				.407***	.375***	.386***
PM fam-conflict	γ_{02}				.557***	.613***	.553***
Family conflict*father	γ_{60}					.087	
PM fam-conflict*father	γ_{70}					-.155	
Gender	γ_{01}	-.971***	-.970***	-.970***	-.764***	-.761***	-.788***
Random effects							
Level-1 Within-person	σ_{ϵ}^2	6.803***	6.800***	6.803***	6.542***	6.537***	5.948***
Level-2 Intercept	σ_0^2	5.379***	5.354***	5.319***	4.788***	4.724***	5.384***
Age	σ_1^2	.009	.009	.008	.016	.017	.024
Family conflict	σ_2^2						.205***
Goodness of Fit							
-2LogLikelihood		15095.8	15094.1	15093.9	13953.3	13949.6	13905.9
AIC		15109.8	15110.1	15111.9	13973.3	13973.6	13931.9
BIC		15141.6	15146.5	15152.8	14018.7	14028.1	13390.9

*** $p < .001$. ** $p < .01$. * $p < .05$. † $p < .1$. Model F compared to Model D: $\Delta\chi^2(3) = 47.4, p < .001$.

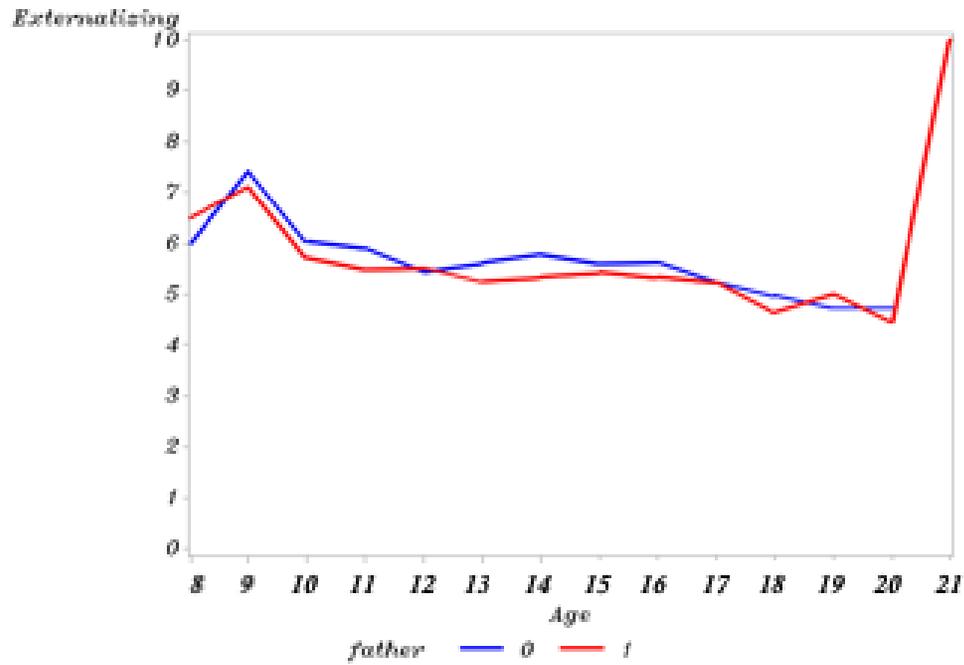


Figure 1. Average levels of externalizing symptoms across age for father presence vs. father absence.

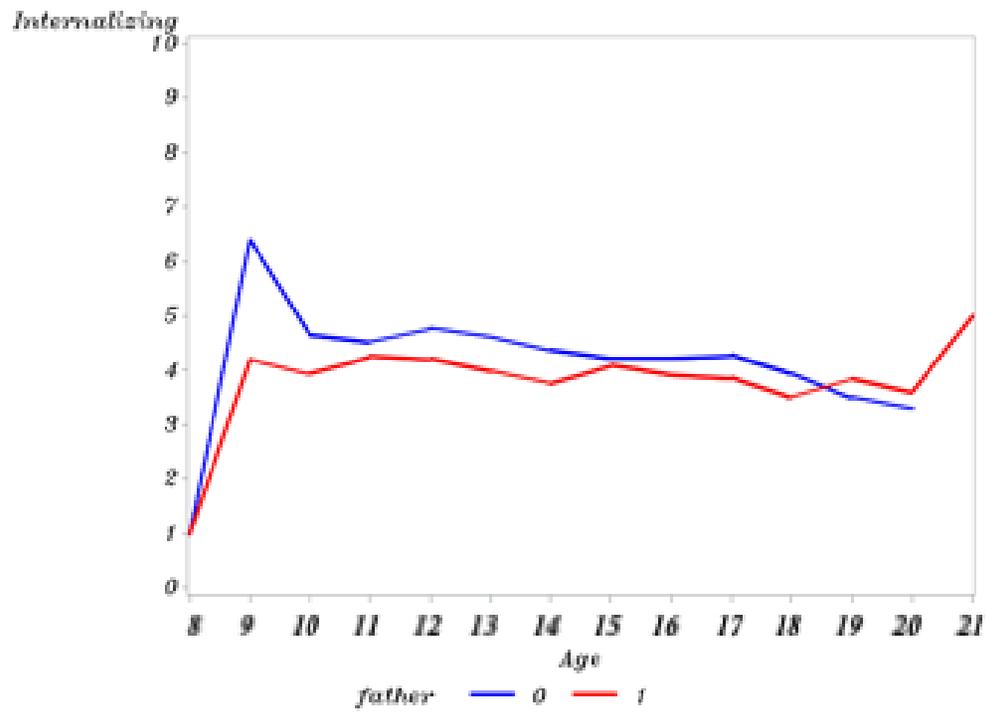


Figure 2. Average levels of internalizing symptoms across age for father presence vs. father absence.