Published in final edited form as:

Dev Psychol. 2012 January ; 48(1): 250–256. doi:10.1037/a0026083.

Socialization in Context: Exploring Longitudinal Correlates of Mothers' Value Messages of Compassion and Caution

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Abstract

This study examined correlates of mothers' value messages using mother and adolescent reports across three years ($N=1638$ dyads). Two fundamental socialization dimensions were assessed: compassion messages (e.g., caring for others) and caution messages (e.g., being wary of others). Multilevel models revealed distinct between-person and within-person correlates for mothers' compassion and caution messages. Individual differences in compassion messages were predicted by family context (e.g., mothers' knowledge of friends and concerns for their child's future) and neighborhood cohesion. Within-person effects demonstrated that compassion declined in concert with adolescents' experiences of being bullied. Caution messages were predicted by mothers' education levels, race/ethnicity, and marital status, and increased in relation to mothers' concerns and perceptions that illegal substances were easily attainable in the community. Tests of age, period, and cohort effects unexpectedly revealed that longitudinal changes in compassion and caution were best explained by period effects. Consistent with new developments in value socialization theory, results suggest that mothers place emphasis on certain values based on their backgrounds, their children's characteristics, and the broader social context.

Keywords

Socialization Messages; Parenting; Adolescence; Communication; Context

Parents are primary socialization agents: In addition to their roles as relational partners and opportunity providers, parents are instructors who communicate values, norms, and rules to

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A longer version of the manuscript was part of the first author's doctoral dissertation, and portions were presented as a poster at the meeting of the National Council on Family Relations, San Francisco, California in 2009.

children (Parke & Buriel, 2006). Recent value socialization theory argues that parenting strategies are altered by the child and situation and that socialization is content-specific (Grusec, Goodnow, & Kuczynski, 2000). Given little empirical work in this area, we explored correlates of mothers' value socialization messages of compassion and caution in a three-year longitudinal sample of mothers and adolescents. Compassion (e.g., caring for others) and caution (e.g., being wary of others) represent two fundamental value messages that mothers communicate to children regarding how to treat others (Flanagan, 2003). We hypothesized that mothers' emphasis on compassion and caution likely varies based on mothers' background, adolescents' age and gender, and adolescents' peer, family, and neighborhood contexts.

Value Socialization: Process and Content

According to person-environment fit and value socialization theories, parents adapt strategies for raising children to the context and the child's developmental stage (Belsky, 1984; Dix, 1992; Grusec & Goodnow, 1994). Although socialization processes likely differ depending on the specific values being communicated (Boehnke, 2001; Knafo & Schwartz, 2003), only a small body of work has examined value socialization content (e.g., Kohn, 1995; Pinquart & Silbereisen, 2004), and these link parents' and children's values without attention to communication about values.

Grounded in the theoretical tenets that value socialization processes are context-dependent and content-specific, we examined individual differences and dynamic change in the values mothers emphasize about how one should treat others. Compassion value messages communicate that all people should be treated with respect and kindness; caution messages urge guardedness lest others take undue advantage (Flanagan, 2003). Socializing compassion is conceptually similar to constructs of other-oriented induction (Hoffman, 1977) and care reasoning (Gilligan, 1982) that sensitize children to the concerns of others and promote prosocial behavior (Eisenberg & Morris, 2004), moral reasoning (Pratt, Skoe, & Arnold, 2004), and political views (Flanagan & Tucker, 1999). Caution messages stem from strategies of 'cocooning,' shielding children from negative influences, and 'prearming' them to defend themselves (Goodnow, 1997). For example, research on ethnic-racial socialization shows that ethnic minority parents brace children to be wary of others' prejudices (Hughes et al., 2006). Such cautions reflect a healthy skepticism, alerting children that sometimes guardedness about others is warranted (Flanagan, 2003). The messages reflect distinct content, yet may not be mutually exclusive, as both are important for learning how to navigate complex interactions with others (Flanagan, 2003).

Mother, Child, and Contextual Correlates

Parenting is multiply determined by parent, child, and contextual characteristics (Belsky, 1984). Thus, we examined mother demographics, child characteristics, as well as peer, family, and neighborhood factors as contextual correlates of compassion and caution messages.

Mother Demographic Characteristics

Socioeconomic status (SES) plays a role in parenting behaviors; more educated parents tend to be more authoritative and communicative (Conger & Dogan, 2007). Previous work linking social class with compassion and caution is lacking. Higher SES mothers may report more compassion and caution messages as they tend to be more communicative.

Alternatively, given its social desirability, compassion may be highly endorsed by all groups. Mothers raising children in less privileged circumstances may employ more pre-arming, urging greater caution.

Diverse family forms have been understudied with respect to value socialization. If two parents working together is more effective (Boehnke, 2001), divorced parents may have less influence (Bengtson, Bilbarz, & Roberts, 2002). Alternatively, when fathers are not present, mothers may intensify all communication or urge more caution. Consistent with ethnic-racial socialization research (Hughes et al., 2006), we hypothesized that African-American mothers would report greater caution messages than White mothers.

Child Characteristics

Socialization goals change as children develop (Grusec & Goodnow, 1994) and, for several reasons, mothers' compassion and caution messages may decrease as adolescents age. First, there may be fewer communication opportunities as adolescents spend more time away from parents (Larson, Richards, Moneta, Holmbeck, & Duckett, 1996). Second, as older adolescents have had more years to internalize values, mothers may take a softer approach. Thus, we hypothesize a linear age-related decline in mothers' value messages.

Parents are more likely to discuss emotions and relationships with daughters than sons (Kochanska & Thompson, 1997), which may facilitate compassion. Yet in one study, boys reported hearing more moral value messages (Pratt, Hunsberger, Pancer, & Alisat, 2003). We expected that mothers of daughters would report more emphasis on compassion than mothers of sons. Given that parents of daughters are generally more restrictive (Madsen, 2008), we expected mothers of daughters to emphasize caution more than mothers of sons.

Peer, Family, and Neighborhood Contexts

Peer bullying has become common, especially during middle school and may provide a "teachable moment." Specifically, we expected that mothers would urge greater caution in response to adolescents' reports of being bullied. Regarding compassion, mothers may deemphasize helping others; alternatively, mothers may stick to the Golden Rule to treat others "as you want to be treated."

Mothers' value messages also may vary based on knowledge about her child's friends, concerns for the child, and the family's religiosity. First, parents who know more about children's activities tend to be more successful in socialization (Grusec, 2002). Familiarity with the child's friends may bolster compassion and decrease caution messages unless mothers are concerned about the peers' characteristics or behaviors, in which case mothers may urge more caution. Second, mothers' concerns for children may be a proxy for socialization goals, and concerned mothers should be more likely to talk with their children.

We hypothesized that maternal concerns would predict more compassion *and* caution messages. Third, religiosity is positively associated with compassion (Sprecher & Fehr, 2005), yet the role of maternal socialization remains unspecified. We expected a positive association between religiosity and compassion messages.

Cohesive neighborhoods where residents are mutually supportive facilitate prosocial interactions (Parke & Buriel, 2006; Putnam, 2000). In contrast, risky neighborhoods where substance use is common likely engender parent vigilance. We hypothesized that *neighborhood cohesion* would positively predict mothers' compassion and negatively predict caution messages and that *ease of attaining substances* would positively predict caution messages.

Method

Separate longitudinal multilevel models examined between- and within-person predictors. The former reflect relatively stable individual differences and the latter dynamic change in a characteristic or context relating to change in socialization messages. *A priori* predictions primarily related to level differences. Where possible, we used adolescent data to eliminate shared method variance of mothers' reports.

In a three-year longitudinal study of adolescents and parents, adolescents were surveyed annually in 90 5th – 12th grade social studies classrooms across eight school districts in the northeast and midwest. Districts reflected regional diversity in ethnicity, size, and urbanicity. Adolescents and parents actively consented to participate, resulting in a wave 1 adolescent response rate of 79% ($N = 2558$). At wave 2, researchers surveyed adolescents who participated in wave 1 and were still in the school system, and recruited new students, with a 54% response rate ($N = 2644$). At wave 3, only prior participants were sought, resulting in a 65% response rate ($N = 1933$).

Parents/guardians of participating adolescents were recruited via mailed surveys. Two were mailed to each home; parent participants were compensated \$20. No other follow-ups or incentives encouraged participation. Parents were similarly recruited annually, regardless of previous participation; new parents were added at each wave. In most cases, only one parent (84% mothers) participated. Wave 1 response rate for one parent per family was 40%, and was similar for waves 2 and 3 (44% and 41%).

We used data from 1638 biological or adoptive mothers (26 were stepmothers, 8 were guardians) who participated in at least one wave. Due to low participation rates ($n = 627$ at any wave, $n = 57$ across waves), father data were not used. The sample was socioeconomically diverse, with 25% reporting family income lower than \$30,000 and 5% reporting more than \$100,000; 85% of mothers were White, 10% Black or African American, and 5% of another ethnicity. Adolescents' age ranged from 10 to 19 at wave 1 ($M = 13.13$, $SD = 2.03$), and 55% were female.

Most mothers (56.4%) completed one wave, 27.8% completed two, and 15.8% completed three. Appendix A summarizes missing data patterns and attrition analyses. To reduce bias to inferences due to missing data, multiple imputation was employed using SAS PROC MI.

Forty datasets were imputed; relative efficiency estimates for all multilevel models were above 98%, demonstrating imputation acceptability. Descriptive statistics were derived from an expectation maximization (EM) dataset, which provides excellent maximum likelihood estimates for descriptive parameters (Graham, 2009).

Measures

We measured the extent to which mothers agreed that they communicated each value message, and factor analysis revealed two distinct factors. Response options were *Strongly Disagree* (1) to *Strongly Agree* (5). Figure 1 shows means plotted by wave and age. Six items measured mothers' value messages of compassion. Items began with "I tell my children..."; content was: "respect people no matter who they are," "not to judge people before you get to know them," "treat everyone equally," "stand up for others, not just yourself," "be helpful to others, especially the less fortunate," and "be aware of other people's feelings" ($\alpha = .77, .74, .78$). Five items measured mothers' value messages of caution. Items began with the same stem as above; content was: "people sometimes take advantage of you," "you can't always trust people," "stay away from the wrong crowd," "be careful who you are kind to", and "be careful in dealing with people" ($\alpha = .64, .63, .71$). Items were adapted from Katz and Hass (1987).

Mothers reported education levels using a 5-point scale: *Didn't finish high school* (1), *High school diploma or GED* (2), *Some training after high school or community college degree* (3), *Bachelor's or 4-year degree* (4), and *Master's, Ph.D. or professional degree* (5). Mothers' marital status was dichotomized, *Married* (1) or *Other* (0); other statuses included divorced or separated, single, and widowed. Mothers' race was dummy-coded into *Black* and *Other Minority*, with *White* as the reference. Comparisons focused on Black versus White participants.

Bullying was measured in the first two waves by asking adolescents whether they or a friend had been bullied in school, *Yes* (1) or *No* (0). At wave 3, adolescents were asked if any friends had been bullied in school, and then if it happened to them. An affirmative response to either question was coded into one variable to mirror previous waves. Four items measured mothers' knowledge of friends, including how well mothers knew the child's best friend, best friend's parents, most of the child's friends, and most parents of the child's friends. Response options were *Not at All* (1), *Somewhat* (2), and *Very Well* (3) ($\alpha = .83, .87, .81$). Mothers' concerns for their child included six items assessing concerns about getting involved with the wrong crowd, violence and drugs in the community, getting into a good college, getting a job that pays well, and finding steady work. Response options were *Not at All Concerned* (1), *Somewhat Concerned* (2), and *Very Concerned* (3) ($\alpha = .77, .76, .76$). Family religiosity was measured by mothers' report of whether they considered their family religious, *Yes* (1) or *No* (0).

Adolescents reported on neighborhood cohesion using eight items, such as people in the neighborhood feel safe, trust each other, and work together ($\alpha = .85, .86, .88$). Mothers reported ease of attaining substances in the community using three items about whether adolescents could get access to cigarettes, alcohol, and drugs if desired ($\alpha = .93, .93, .95$). Response options for both scales ranged from *Strongly Disagree* (1) to *Strongly Agree* (5).

Analytic Plan

Separate unconditional growth models were estimated using SAS PROC MIXED to understand how mothers' compassion and caution messages changed over time. Our accelerated longitudinal/cohort-sequential design (see Figure 1) reveals developmental patterns across 10 years with data for only three consecutive years (Raudenbush & Chan, 1992). Given this complexity, changes over time could represent age, period, or cohort effects, which we estimated using multilevel models with waves of data nested within individuals (see Appendix B for details). After selecting best-fitting growth models for compassion and caution messages, predictors were simultaneously entered into the two models to examine unique effects. Mothers' education, marital status, and race, adolescent gender, and family religiosity were level-2 (time-invariant) predictors. All other variables were entered as level-1 (within-person) and level-2 (between-person) predictors.

Results

Table 1 displays means and correlations among longitudinal variables. Compassion and caution showed small, positive correlations across waves (range .07 to .13, p 's < .001).

Age, Period, and Cohort

Three separate models estimated combinations of age, period, and cohort effects for compassion and caution messages, respectively (see Appendix B). A period only model was selected as most parsimonious for compassion messages: Mothers' compassion messages declined consistently across the three occasions, regardless of adolescents' age or age cohort, a pattern consistent with means in Figure 1a. The most parsimonious model for mothers' caution messages was period and age: Mothers' caution increased at wave 2 and also showed linear age-related decline.

Full Models

Compassion—Period effects remained significant and mothers' compassion messages decreased between wave 1 and later waves (see Table 2). Neither mother nor child characteristics predicted compassion messages. Adolescents' experiences of bullying predicted within-person change in mothers' compassion messages: On occasions when adolescents reported that they or their friends were bullied, mothers de-emphasized compassion. Mothers with more knowledge of children's friends reported more compassion messages. Mothers with greater concerns and more family religiosity reported greater compassion messages. Within-person effects for family context were not significant. Regarding neighborhood context, only the between-person effect of neighborhood cohesion positively predicted compassion messages: When adolescents reported more cohesion mothers reported more compassion messages.

Caution—Mothers' caution messages increased at wave 2 and declined marginally at wave 3, yet the age-related decline was no longer significant (see Table 2). As expected, social class, race, family structure, and gender predicted caution messages: Mothers who were less educated, Black, and unmarried emphasized greater caution. Mothers of daughters reported greater caution messages. Experiencing bullying was not associated with caution messages.

Regarding family context, neither mothers' knowledge nor religiosity predicted caution messages. However, both between- and within-person effects were found for mothers' concerns for the child: On average, more concerned mothers urged greater caution and, as mothers' concerns increased, caution messages correspondingly increased. Within-person, when mothers' felt it was easier to obtain alcohol, cigarettes, or drugs in the community, caution messages correspondingly increased. Neighborhood cohesion was not associated with caution messages.

Discussion

Complex longitudinal models with multiple predictors and reporters were tested to understand mothers' value socialization messages. Unique predictors emerged for mothers' compassion and caution messages: Whereas family context primarily predicted compassion, demographic characteristics predicted caution messages.

Advancements in Socialization Research

Past research has largely considered associations between parents' and adolescents' personal values a proxy for socialization (Boehnke, 2001); we add precision by focusing on the value content that mothers communicate. Results suggest that value socialization is both context-dependent and content-specific. Results from within-person analyses revealed ways that mothers dynamically adapt value messages over time: Compassion messages changed in concert with adolescents' experiences of bullying and caution with changes in mothers' concerns and perceived ease of obtaining substances. Despite modest effect sizes, dynamic relationships with compassion messages were particularly intriguing, given arguments that parental socialization of moral development is rather inflexible and socially desirable (Kuczynski & Grusec, 1997). Compassion messages were sensitive to mothers' concerns about the child, knowledge of children's friends, children's experiences of bullying, and reports of neighborhood cohesion. In contrast, predictors of caution messages were less fluid; Black, working-class, and unmarried mothers communicated more caution across time. These demographic characteristics are proxies for contexts that demand more cocooning.

As suggested by their positive, albeit small correlation, compassion and caution messages are not necessarily mutually exclusive. Associations may result from shared method variance among mother reports and suggest a common factor of maternal communication. Items in both measures urge adolescents to pay attention to and be aware of other people. Future research should examine how compassion and caution messages work in concert to influence adolescents' values and behaviors.

Period, Not Age

Despite age-related hypotheses, we concluded based on careful tests of age, period, and cohort that period effects best explained the longitudinal changes: Value messages changed in the same way over time for mothers regardless of adolescents' age. Patterns could reflect measurement artifacts (e.g., regression to the mean, practice effects). Period effects also call for contemplating the historical milieu, although explanations must be generated *post hoc*.

Data were collected shortly after the September 11th, 2001 terrorist attack on the U.S. which may have sparked family conversations about compassion and caution toward others. In developmental research, age effects need to be rigorously evaluated against rival hypothesis of period and cohort effects (Raudenbush & Chan, 1992).

Mother and Child Characteristics

More vulnerable groups may espouse greater caution messages: Here they were emphasized among less educated, unmarried, and African American mothers. Smith (1997) has referred to “groups at the periphery” of society who typically report lower levels of trust in others. Consistent with racial socialization literature (Hughes et al., 2006), Black mothers were more likely to urge caution, warning children to be careful and that people aren’t always trustworthy. Future research should identify characteristics of families who face similar challenges in raising children that may reflect a common need to pre-arm them (Goodnow, 1997). This interpretation is consistent with the greater caution messages reported by mothers of daughters; no similar gender of child effect was found for messages of compassion. Mothers may worry more about daughters’ safety and thus offer more verbal strategies for daughters’ protection.

Peer Family and Neighborhood Contexts

Strikingly, adolescent reports of themselves or friends being bullied predicted within-person change in mothers’ compassion messages. Although a small effect needing replication, this suggests that mothers may limit compassion communication when adolescents experience run-ins with bullies. Unexpectedly, being bullied did not prompt greater caution messages. Perhaps increased vigilance may not necessarily help one avoid bullies; some evidence suggests that social fear is related to *increased* victimization (Rubin, Coplan, & Bowker, 2009). Future studies should tease apart bullying experiences of adolescents and their friends.

As hypothesized, mothers with greater knowledge of children’s friends reported greater compassion messages. Parental knowledge has wide-ranging implications for adolescent outcomes, yet few studies examine the role of knowledge in value socialization. Parental knowledge may facilitate adolescents’ internalization of socialization messages, particularly when children voluntarily disclose information, as disclosure suggests a positive parent-child relationship (Grusec, 2002).

Mothers’ concerns positively related to compassion and caution messages. The construct captured various worries that parents have for children from negative peer influence to future jobs. Concerns may prompt maternal caution messages, an idea supported by within- and between-person effects. *Both* compassion and caution messages prepare children for interactions with others; these communications were heightened for more concerned mothers. High concerns may be tapping into overprotection or maternal anxiety, or could reflect anxieties of adolescents, who may initiate conversations about values by communicating concerns to parents (Parke & Buriel, 2006).

As expected, family religiosity was positively associated with compassion messages. Compassion messages may be bolstered by religious teachings. Religious connections may also offer supportive bonds with others that encourage mothers to view humanity positively and thus communicate compassion to children.

Neighborhood cohesion was related to greater compassion messages, a finding strengthened by our reliance on adolescent reports. Positive bonds with others may engender feelings of trust and connectedness, and thus reflect social capital (Putnam, 2000). The within-person association of ease of attaining substances on caution messages suggests that mothers may adapt messages with shifting perceptions of neighborhood risk. When risks to adolescents heighten, mothers likewise may respond by heightening caution messages.

Limitations and Conclusions

Several limitations are noteworthy. Fathers were not studied, leaving unknown whether fathers' value messages are determined by the same factors. Potential correlates were unmeasured, such as mothers' own values and parenting style. Internal reliability for caution messages was low, potentially explaining small effect sizes and unsupported hypotheses regarding caution. In using multiple imputation, we assumed data were missing at random (MAR); the extent of violations to this assumption cannot be fully known. Although within-person effects give some insights into co-occurrence of factors, we did not test causal determinants. Finally, it was beyond the scope of our study to link value socialization messages to adolescents' values and behaviors, but this is an important next step.

This study offered new empirical information about individual differences in mothers' value messages and insight into adolescent experiences and contexts that correspond with dynamic change in value messages. Our findings of different correlates associated with the two types of value messages suggest that mothers' communication of certain values may be motivated by different factors and thus, parenting processes may vary by content and context. Despite limitations, this study empirically advances contextual perspectives on parenting and content-specific approaches to value socialization (Belsky, 1984; Grusec et al., 2000). Further examining contextual influences on socialization messages may bring important insights into contextual and cultural variations in parenting and adolescent development. Developmental scientists have only reached the tip of the iceberg in studying the exciting theme of bidirectional, transactional developmental processes.

Acknowledgments

Data collection was funded by the National Institute on Drug Abuse [R01 DA13434; PI Constance Flanagan], and the first author's time was supported by a Ruth L. Kirschstein National Research Service Award from the National Institute on Drug Abuse [F31 DA024543]. We thank Ann C. Crouter, Wayne Osgood, and John Graham for comments on previous drafts, and we are grateful to the adolescents and parents who participated in the study.

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1a

Mothers' Messages of Compassion: Raw Means Plotted by Age and Age Cohort

1b

Mothers' Messages of Caution: Raw Means Plotted by Age and Age Cohort

Figure 1.

Table 1

Means and Bivariate Correlations for Longitudinal Study Variables

	Mean(SD)	1	2	3	4	5	6	7	8	9	10
(1)Compassion1	4.36(.47)	1									
(2)Compassion2	4.23(.48)	.57***	1								
(3)Compassion3	4.18(.47)	.50***	.51***	1							
(4)Caution1	3.90(.57)	.13***	-.002	.07**	1						
(5)Caution2	3.92(.52)	.19***	.07**	-.001	.56***	1					
(6)Caution3	3.82(.54)	.13***	.01	.11***	.48***	.62***	1				
(7)Bullied1	0.53	-.01	.08**	-.01	-.06*	.04 [†]	.01	1			
(8)Bullied2	0.41	.06*	-.004	.06**	-.01	-.01	-.01	.25***	1		
(9)Bullied3	0.29	.06*	.09***	.002	.10***	.05*	.11***	.15***	.26***	1	
(10)Knowledge1	2.32(.51)	.12***	.02	.05*	-.04	-.07**	.05*	-.02	.02	-.07**	1
(11)Knowledge2	2.49(.49)	.08***	.07**	.04	-.10***	-.06*	-.04	-.08**	-.05 [†]	-.09***	.49***
(12)Knowledge3	2.45(.45)	.11***	.03	.10***	-.03	-.04 [†]	.01	.07**	-.01	-.03	.48***
(13)Concerns1	2.27(.47)	.08**	.06*	-.09***	.25***	.16***	.20***	-.02	.04 [†]	.08***	-.05*
(14)Concerns2	2.19(.47)	.04 [†]	.02	-.10***	.22***	.22***	.21***	.04 [†]	.04	.09***	-.06*
(15)Concerns3	2.14(.48)	-.01	.10***	-.02	.17***	.18***	.23***	.03	-.001	.10***	-.12***
(16)Cohesion1	3.53(.75)	.04	.10***	.12***	-.09***	-.04	-.13**	-.02	.03	.01	.04
(17)Cohesion2	3.44(.75)	.13***	.12***	.18***	-.07**	-.05 [†]	-.07**	-.04	.003	.02	.08***
(18)Cohesion3	3.42(.76)	.04	.03	.08***	-.03	-.03	-.05*	-.01	.04 [†]	-.07**	.08***
(19)Ease of SU1	3.12(1.16)	-.001	-.02	.09***	-.04	-.06**	-.07**	-.04	-.001	-.03	.07**
(20)Ease of SU2	3.31(1.14)	-.08***	.01	.01	-.17***	-.01	.003	.01	.04 [†]	.04	-.06
(21)Ease of SU3	3.36(1.13)	.04	.13***	.04	-.09***	.02	.05*	.001	.06*	.01	-.01
(11)Knowledge2	1										
(12)Knowledge3	.55***	1									
(13)Concerns1	-.05 [†]	-.01	1								

	Mean(SD)	1	2	3	4	5	6	7	8	9	10
(14)Concerns2	-.09***	.08***	.58***	1							
(15)Concerns3	-.13***	-.15***	.57***	.62***	1						
(16)Cohesion1	.14***	.05+	-.04	-.08**	-.05*	1					
(17)Cohesion2	.13***	.08***	-.05*	-.07***	-.12***	.45***	1				
(18)Cohesion3	.15***	.06*	-.04	-.02	-.07**	.48***	.54***	1			
(19)Ease of SU1	-.02	-.06*	-.07**	-.04	-.08**	-.04 [†]	-.01	-.001	1		
(20)Ease of SU2	-.02	-.05*	-.14***	-.05*	-.02	-.10***	-.01	-.07**	.50***	1	
(21)Ease of SU3	-.07**	-.13***	-.05*	-.07***	.001	-.08**	-.07**	-.06*	.44***	.54***	1

Note. Means (SDs) and correlations come from the EM dataset.

[†]
p < .10,

*
p .05,

**
p .01,

p .001.

Knowledge = Mothers' Knowledge of Friends, Concerns = Mothers' Concerns, Cohesion = Neighborhood Cohesion, Ease of SU = Ease of Attaining Illegal Substances in Community.

Table 2

Full Multilevel Models of Correlates for Mothers' Compassion and Caution Messages

Fixed Effects	Mothers' Value Messages	
	Compassion	Caution
Intercept	4.31(.03)***	3.93(.04)***
<i>Period: L2^a</i>		
Wave 2 (Spring 2003) ^b	-.13(.02)***	.04(.02)*
Wave 3 (Spring 2004) ^b	-.19(.02)***	-.05(.02) [†]
<i>Adolescent Age: L1^c</i>		
Age Linear	----	-.01(.007)
<i>Mother Characteristics: L2</i>		
Education	-.005(.01)	-.05(.01)***
Married (Yes=1, No=0)	.02(.02)	-.07(.03)**
Race: Black ^d	-.01(.04)	.14(.04)***
Race: Other ^d	-.02(.05)	.02(.05)
<i>Adolescent Gender: L2</i>		
(Male=1, Female=0)	-.03(.02)	-.05(.02)*
<i>Peer Context</i>		
Experienced Being Bullied: L1	-.03(.02)*	-.02(.02)
Experienced Being Bullied: L2	.07(.04) [†]	.04(.05)
<i>Family Context</i>		
Knowledge of Friends: L1	.02(.02)	-.003(.03)
Knowledge of Friends: L2	.14(.03)***	-.003(.04)
Mothers' Concerns: L1	.02(.02)	.06(.03)*
Mothers' Concerns: L2	.07(.03)*	.28(.04)***
Family Religiosity: L2	.05(.03)*	.01(.03)
<i>Neighborhood Context</i>		
Neighborhood Cohesion: L1	.003(.01)	-.01(.02)
Neighborhood Cohesion: L2	.06(.02)***	-.02(.02)
Ease of Attaining Substances: L1	-.001(.01)	.02(.01)*
Ease of Attaining Substances: L2	-.001(.01)	-.02(.02)

Note. Linear age centered at age 14.

^a L2=Level 2 Effects.

^b Reference = Wave 1.

^c L1=Level 1 Effects.

^d Reference=White.

[†] $p < .10$,

*
 p .05,

**
 p .01,

 p .001.

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