

Parental Warmth and Psychological Wellbeing of Senior School Students in Turbo Sub-County, Kenya: A Convergent Mixed-Methods Study

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ABSTRACT

Adolescent mental health is a growing concern in Kenya, yet little is known about how specific parenting behaviours shape the psychological wellbeing of students in rural settings. This study examined the influence of parental warmth on the psychological wellbeing of senior school students in Turbo Sub-County, Uasin Gishu County, Kenya. Guided by Baumrind's parenting styles theory, Attachment Theory and Self-Determination Theory, the study adopted a convergent parallel mixed-methods design that combined an ex-post facto quantitative strand with a phenomenological qualitative strand. Questionnaire data were obtained from 132 students selected through stratified random sampling, while qualitative data were gathered through semi-structured interviews with parents/guardians, teachers, guidance and counselling personnel and school counsellors, and six focus group discussions with students. Quantitative data were analysed using descriptive statistics, Pearson correlation and multiple regression in SPSS version 27; qualitative data were analysed thematically in NVivo. Students reported high levels of parental warmth (overall $M = 4.03$ on a 5-point scale), although responsiveness to feelings ($M = 3.54$) and praise ($M = 3.65$) were rated lowest. Parental warmth was strongly and positively correlated with psychological wellbeing ($r = .618, p < .001$), accounting for 38.2% of its variance, and it was the strongest unique predictor when parental control, parent-child communication and monitoring were controlled ($\beta = .358, t = 6.789, p < .001$). Four themes emerged: warmth expressed through provision, variable emotional availability, culturally shaped expression of affection, and the protective role of warmth. The null hypothesis was rejected. The study recommends parenting programmes that help caregivers translate instrumental care into verbal affirmation, attentive listening and praise.

Keywords: parental warmth; psychological wellbeing; adolescents; senior school students; mixed methods; Kenya

1. Introduction

Adolescence is a period of rapid biological, emotional and social change in which the foundations of adult mental health are laid. The World Health Organization (2024) estimates that about one in seven adolescents worldwide lives with a mental health condition, most of which go unrecognised and untreated. In Kenya, depressive symptoms are common among school-going adolescents (Magige et al., 2025), while only a small fraction of adolescents with mental disorders use mental health services (Wahdi et al., 2025). This treatment gap places a premium on protective factors that operate before distress becomes disorder, and the family is the most proximal of these.

Psychological wellbeing is a multidimensional construct encompassing self-acceptance, positive relations with others, personal growth, purpose in life, environmental mastery and autonomy, together with positive affect and life satisfaction (Ryff, 1989). Among the many family influences on these outcomes, parental warmth, the affection, emotional support, acceptance and responsiveness that parents show their children, has received particular attention. Meta-analytic evidence shows that parental warmth is positively associated with adolescent self-esteem ($r = .26$; Pinquart & Gerke, 2019) and negatively associated with internalising symptoms such as anxiety and depression (Gorostiaga et al., 2019). A meta-analysis of 155 studies further found that positive parenting was associated with subjective wellbeing, life satisfaction and positive

affect (Huang et al., 2026), while parental support has been linked to higher self-esteem and, through it, to fewer depressive symptoms (Tehrani et al., 2025).

Longitudinal and intensive studies point in the same direction. In a four-wave study of Mexican-origin families, warm parenting predicted higher and more stable self-esteem trajectories from age 10 to 16 (Krauss et al., 2020). Using 100 daily reports from 159 Dutch parent-adolescent dyads, Bülow et al. (2022) found that parental warmth was positively linked to adolescent wellbeing in the large majority of families, leading them to describe warmth as a "universal ingredient" of parenting teens. García et al. (2020), studying three generations in Spain, concluded that warmth mattered more for psychosocial adjustment than strictness.

Evidence from Africa, although thinner, is consistent. A four-country study that included Kenya found that parental warmth mediated the link between parents' dyadic coping and adolescent externalising behaviour in every country studied (Skinner et al., 2022). In Kenya, Monda et al. (2021) reported that parental nurturing practices explained 53% of the variance in learners' behavioural adjustment, with warmth making the largest contribution ($\beta = .39$), and Ngari et al. (2024) identified warmth and acceptance as important predictors of problem behaviour among students in Embu County. However, most of this work was conducted in urban or peri-urban settings, treated warmth as one component of broad parenting typologies rather than as a distinct dimension, and relied on single-method designs. Moreover, how warmth is expressed may vary across cultures: in many African communities affection is shown through provision and sacrifice rather than verbal expression (Mesman et al., 2016), a possibility that purely quantitative studies cannot examine.

Turbo Sub-County in Uasin Gishu County offers a relevant setting in which to address these gaps. It is a largely agricultural, rural and peri-urban area where many parents are farmers or casual labourers, working hours that may limit their emotional availability, and where teachers and health workers report rising emotional distress among adolescents. The present study therefore sought to examine the influence of parental warmth on the psychological wellbeing of senior school students in Turbo Sub-County, Kenya. It tested the null hypothesis (H_{01}) that parental warmth has no influence on the psychological wellbeing of senior school students, and explored how students, parents and school personnel understand and experience parental warmth.

1.1 Theoretical Framework

The study was anchored in Baumrind's theory of parenting styles (Baumrind, 1966, 1991), as extended by Maccoby and Martin (1983) into a dimensional model with two axes: responsiveness (warmth, support, acceptance) and demandingness (rules, control, monitoring). Parental warmth represents the core of the responsiveness dimension. The dimensional approach allows warmth to be examined as a continuous and distinct predictor rather than only as a feature of authoritative or permissive typologies. Attachment Theory (Bowlby, 2008) explains why warmth matters: consistent, responsive caregiving provides a secure base from which adolescents can explore, regulate emotion and build a positive self-concept. Self-Determination Theory

(Ryan & Deci, 2024; Vansteenkiste et al., 2020) adds that warmth satisfies the basic psychological need for relatedness, which is a precondition for wellbeing. Together, these perspectives predict that higher parental warmth will be associated with better psychological wellbeing, while also recognising, following Chao (1994), that the behaviours through which warmth is communicated are culturally shaped.

2. Methods

2.1 Research Design

The study was grounded in pragmatism and used a convergent parallel mixed-methods design (Creswell & Clark, 2017), in which quantitative and qualitative data were collected concurrently, analysed separately and merged during interpretation. The quantitative strand used an ex-post facto (causal-comparative) design, appropriate because students had already experienced the parenting practices under study. The qualitative strand used a phenomenological design to capture how participants experienced and interpreted parental warmth.

2.2 Study Area and Population

The study was conducted in Turbo Sub-County, one of six sub-counties in Uasin Gishu County in Kenya's North Rift region. The sub-county has 21 senior schools (14 public and 7 private) with an enrolment of 3,870 students. The target population of 10,095 comprised senior school students, their parents/guardians, teachers, guidance and counselling personnel, school administrators and school counsellors/psychologists.

2.3 Sample and Sampling

A sample of 385 participants was determined using Yamane's (1967) formula at a 5% margin of error and allocated proportionately across participant categories. Students ($n = 148$) were selected through stratified random sampling by school type, gender and grade level; teachers through simple random sampling; and parents/guardians, guidance and counselling personnel, administrators and counsellors through purposive sampling. A total of 333 participants responded (86.5%), including 132 students (89.2%), 186 parents/guardians, 7 teachers, 2 guidance and counselling personnel, 2 administrators and 4 school counsellors. In addition, six focus group discussions (FGDs) of six to eight purposively selected students (about 48 in total) were held.

2.4 Instruments

Quantitative data were collected using a structured student questionnaire. Parental warmth items were adapted from the Parenting Practices Questionnaire (Jelić et al., 2025) and supplemented with context-specific items; responses were given on a 5-point frequency scale (1 = hardly ever to 5 = all of the time). Psychological wellbeing was measured with items adapted from the Warwick-Edinburgh Mental Wellbeing Scale (Tennant et al., 2007). A semi-structured interview guide for parents and school personnel and an FGD guide for students explored how warmth was expressed, perceived and linked to adolescents' emotional wellbeing. Face and content validity were established through a panel of three educational psychologists and counselling researchers, and construct validity through confirmatory factor analysis of pilot data. The instruments were

piloted with 39 participants in neighbouring Soy Sub-County; internal consistency was assessed with Cronbach's alpha and stability with a two-week test-retest, with coefficients of .70 or above regarded as acceptable.

2.5 Data Collection and Analysis

Questionnaires were administered in classrooms under the supervision of the researcher and trained assistants and took 30–45 minutes. Interviews (45–60 minutes) and FGDs (60–90 minutes) were audio-recorded with consent and transcribed verbatim. Quantitative data were screened for missing values, outliers, normality, linearity, homoscedasticity and multicollinearity, and then analysed in IBM SPSS version 27 using means, standard deviations, Pearson correlation and multiple regression, in which parental warmth was entered alongside parental control, parent-child communication and parental monitoring so that its unique contribution could be estimated. Qualitative data were analysed in NVivo following Braun and Clarke's (2006, 2021) six phases of thematic analysis, using both deductive and inductive coding. The two sets of findings were then merged to identify convergence and divergence (Fetters et al., 2013).

3. Results

3.1 Characteristics of Student Respondents

Table 1 summarises the characteristics of the 132 student respondents. The sample was fairly balanced by gender and grade, most students (76.5%) were aged 15–18 years, and nearly three-quarters attended public schools. Notably, 40.9% of students did not live with both parents. Among parents/guardians, farming (41.9%) and casual labour (16.7%) were the main occupations.

Table 1. Demographic characteristics of student respondents ($N = 132$)

Characteristic	n	%
Gender		
Male	71	53.8
Female	61	46.2
Age (years)		
13–14	18	13.6
15–16	47	35.6
17–18	54	40.9
19 and above	13	9.8
Grade		

Characteristic	n	%
Grade 10 / 11 / 12	42 / 47 / 43	31.8 / 35.6 / 32.6
School type		
Public / Private	96 / 36	72.7 / 27.3
Family structure		
Both parents	78	59.1
Mother only	25	18.9
Father only	12	9.1
Guardian(s) / other	17	12.9

Source: Field data (2026).

3.2 Level of Parental Warmth

Students' ratings of parental warmth are presented in Table 2. Warmth was rated highly overall ($M = 4.03$). Most students reported that their parents showed affection and expressed love ($M = 4.23$; 82.6% very often or all of the time) and that they felt emotionally supported ($M = 3.97$). Students strongly endorsed the view that feeling loved and supported helped them feel mentally well ($M = 4.41$; 87.8%). However, the more specific and interactive forms of warmth were rated lowest: parents' praise for accomplishments ($M = 3.65$) and responsiveness when students shared feelings or problems ($M = 3.54$), with about 18% of students reporting that their parents were responsive only sometimes or hardly ever. Standard deviations (0.76–1.08) indicated moderate variation in students' experiences.

Table 2. Students' ratings of parental warmth ($N = 132$)

Statement	HE (%)	S (%)	O (%)	VO (%)	AT (%)	M	SD
My parent(s)/guardian(s) show affection and express love toward me	1.5	3.8	12.1	36.4	46.2	4.23	0.89
I feel emotionally supported by my parent(s)/guardian(s)	3.0	6.1	16.7	39.4	34.8	3.97	0.94
My parent(s) praise me when I do something well	4.5	10.6	21.2	36.4	27.3	3.65	1.02
My parent(s) are responsive when I share my feelings or problems	6.1	12.1	22.7	33.3	25.8	3.54	1.08

Statement	HE (%)	S (%)	O (%)	VO (%)	AT (%)	M	SD
Feeling loved and supported by my parents helps me feel mentally well	0.8	2.3	9.1	34.8	53.0	4.41	0.76
Parental warmth and affection contribute positively to students' psychological wellbeing	1.5	3.0	10.6	36.4	48.5	4.35	0.82
Overall mean						4.03	

Note. HE = hardly ever; S = sometimes; O = often; VO = very often; AT = all of the time. Source: Field data (2026).

3.3 Influence of Parental Warmth on Psychological Wellbeing

As shown in Table 3, parental warmth had a strong, positive and statistically significant correlation with psychological wellbeing ($r = .618, p < .001$), explaining 38.2% of the variance in wellbeing scores. In the multiple regression model containing all four parenting dimensions, which together explained 48.9% of the variance in wellbeing ($R^2 = .489$, adjusted $R^2 = .473$, $F(4, 127) = 29.86, p < .001$), parental warmth made the largest unique contribution ($B = 0.312, \beta = .358, t = 6.789, p < .001$), ahead of parent-child communication ($\beta = .287$), parental monitoring ($\beta = .214$) and parental control ($\beta = .168$). Holding the other dimensions constant, a one-unit increase in parental warmth was associated with a 0.312-unit increase in psychological wellbeing. The null hypothesis H_{01} was therefore rejected.

Table 3. Correlation and regression results for parental warmth and psychological wellbeing

Statistic	Value
Pearson correlation (r)	.618***
Coefficient of determination (r^2)	.382
Unstandardised coefficient (B)	0.312
Standardised coefficient (β)	.358***
t -value	6.789
Full model: R^2 / adjusted R^2	.489 / .473
Full model: $F(4, 127)$	29.86***
Decision on H_{01}	Rejected

Note. Regression coefficients are from a model that also included parental control, parent-child communication and parental monitoring. *** $p < .001$. Source: Field data (2026).

3.4 Qualitative Findings

Thematic analysis of interview and FGD data produced four themes that help explain the quantitative pattern.

Theme 1: Warmth expressed through provision. Many students and parents described warmth mainly in terms of practical care rather than words. One student explained:

"My parents show they love me by making sure I have what I need for school – uniform, books, fees. They don't always say 'I love you' but I know they care because they work hard for me." (FGD, Student 4)

A parent confirmed: "In our culture, we show love to our children by providing for them... We don't always sit down and talk about feelings." (Interview, Parent 7)

Theme 2: Variable emotional availability. Some students described attentive parents: "My mother always knows when something is wrong with me... She listens without judging me. That makes me feel secure." (FGD, Student 9). Others experienced limited emotional contact, which school staff linked to livelihood pressures:

"Many parents in this area are farmers or work in casual jobs. They leave home early and come back tired in the evening. They may not have the energy to sit and talk with their children about emotional issues." (Interview, Teacher 3)

Consistent with this, parents rated heavy work demands as the most serious challenge to offering warmth ($M = 4.01$, $SD = 1.08$), with 75.3% describing it as a serious or very serious problem.

Theme 3: Culturally shaped expression of affection. A counsellor observed that "open displays of affection between parents and adolescents are not always common. Parents may show love through respect, discipline, and provision... Students may interpret this as lack of warmth, but it's actually a cultural expression of care" (Interview, Counsellor 2).

Theme 4: The protective role of warmth. Students consistently linked warmth to confidence and coping: "When my parents are warm and supportive, I feel confident... When they are cold or distant, I feel alone and stressed" (FGD, Student 2). Guidance staff agreed that "students who come from warm families generally have higher self-esteem and better coping skills... Those from cold or rejecting families often present with anxiety, depression, and behavioural problems" (Interview, G&C Personnel 1).

4. Discussion

This study examined the influence of parental warmth on the psychological wellbeing of senior school students in rural Kenya. The quantitative and qualitative strands converged on a clear conclusion: parental warmth was the most influential of the four parenting dimensions examined, and students themselves recognised it as central to how they felt.

The correlation observed ($r = .618$) is considerably larger than the pooled associations reported in international meta-analyses, such as $r = .26$ for warmth and self-esteem (Pinquart & Gerke, 2019). Part of this difference may reflect the broader, positively framed wellbeing measure used here, and part may reflect shared-method variance, since both warmth and wellbeing were self-reported by students. Nonetheless, the finding that warmth retained the largest unique effect ($\beta = .358$) after control, communication and monitoring were accounted for supports the dimensional

view that responsiveness contributes to adolescent outcomes independently of demandingness (Maccoby & Martin, 1983). The result is consistent with Kenyan evidence that warmth is the strongest of several nurturing practices in predicting learners' adjustment (Monda et al., 2021) and with multi-country data identifying warmth as a protective factor in Kenyan families (Skinner et al., 2022). It also echoes the conclusion of García et al. (2020) that warmth matters more for adjustment than strictness.

The descriptive profile adds nuance. Students rated general affection highly but rated praise and responsiveness to feelings lowest. The qualitative data suggest why: warmth in Turbo Sub-County is commonly expressed instrumentally, through paying fees and providing food and clothing, while verbal affirmation and emotional conversation are less customary. This pattern is in line with cross-cultural work showing that the behavioural expression of care differs across societies (Chao, 1994; Mesman et al., 2016), and it resembles the moderate levels of parental responsiveness reported among adolescents in neighbouring Ainabkoi Sub-County (Etiang, 2022). From the standpoint of Attachment Theory and Self-Determination Theory, however, it is the responsive, attuned element of warmth, being listened to and understood, that most directly builds a secure base and satisfies the need for relatedness (Bowlby, 2008; Ryan & Deci, 2024). The gap between provision and responsiveness therefore represents a practical target for intervention: many parents already care deeply, but students may not always perceive that care in the forms that matter most for their emotional wellbeing.

The finding that work demands were the most serious barrier to warmth reflects the ecological context of the study. With most families dependent on farming, trade or casual labour, and about two in five students not living with both parents, parents' time and energy for emotional engagement are constrained. This suggests that interventions should not merely urge parents to be "warmer" but should offer brief, feasible ways of expressing warmth that fit around demanding livelihoods.

4.1 Limitations

The cross-sectional, ex-post facto design precludes causal inference, and reverse or reciprocal effects are plausible: adolescents with better wellbeing may elicit, or perceive, more warmth. Both warmth and wellbeing were measured through student self-report, which may inflate associations and is subject to social desirability bias. The quantitative sample ($n = 132$) was drawn from a single sub-county, which limits generalisability. Future research should use longitudinal designs, parent and adolescent reports, and culturally validated measures that capture instrumental as well as verbal forms of warmth.

5. Conclusion and Recommendations

Parental warmth significantly and positively influences the psychological wellbeing of senior school students in Turbo Sub-County and is the strongest unique parenting predictor of wellbeing among the dimensions studied. Warmth is widely present but is expressed mainly through provision, while responsiveness to adolescents' feelings and praise for their efforts are comparatively weak. The study recommends that (i) parents and guardians complement material provision with regular verbal affirmation, praise and attentive, non-judgemental listening, even through short daily conversations; (ii) schools, through their guidance and counselling departments, run parent education sessions on emotional responsiveness and work with parents

to identify students from less supportive homes; (iii) counsellors adopt family-centred approaches that assess and strengthen parental warmth; and (iv) county and national authorities integrate culturally sensitive positive-parenting content into school and community mental health programmes, with attention to the time constraints of farming and casual-labour households.

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