

Self-Regulation, Family Climate, And Gender: A Study of Rural Adolescent Development

Sukhminder Kaur¹, Harjot Kaur^{2*}

ABSTRACT

The adolescent period presents both opportunities for growth and positive development, as well as heightened risks and challenges. Indeed, adolescence and the student life era frequently coincide, posing several challenges for young people. Their social and academic pressures are so great that they are susceptible to mental health problems like substance abuse, eating disorders, anxiety, and depression. Peer pressure, the difficulties of identity exploration, and academic expectations may all contribute to these issues. Since self-regulation is a significant indicator of adaptive functioning and well-being, understanding its relationship to family climate, a crucial contextual factor, can help develop tailored therapies for this population. Although studies have explored how familial surroundings affect adolescents' ability to self-regulate, there is comparatively less research investigating this connection specifically among rural adolescents. Therefore, the present study aimed to analyse the association between self-regulation and family climate among adolescents from rural areas. It was hypothesized that Self-regulation would be positively correlated with positive family climate and negatively correlated with negative family climate among adolescents. Keeping in view, gender disparities in socialization (e.g., autonomy for boys vs. emotional support for girls) may result in varying home climate and self-regulation experiences. In this regard, it was hypothesized that female adolescents would be higher on self-regulation and perceive positive family climate as compared to male adolescents. For this purpose, 100 (Male=50, Female=50) adolescents in the age range of 14-18 years were drawn from government schools situated in rural areas of Barnala and Patiala districts of Punjab. All the participants were born and brought up in a rural setup. Further, they were assessed on a self-regulation questionnaire (Brown, Miller & Lawendowski, 1999) and Family Climate Scale (Dr. Beena Shah, 1990) in a group setting. The obtained data were subjected to Pearson product-moment correlation, which showed a significant positive association, suggesting that adolescents who perceived a supportive familial environment had higher self-regulation, while a negative family climate hinders the self-regulatory abilities among adolescents. Further, the t-test revealed that females scored higher on self-regulation and showed a negative exposure to family climate. The findings highlight the importance of family dynamics in promoting self-regulation, implying that rural adolescents could benefit from family-centred initiatives to improve their psychosocial development.

¹Associate Professor, Department of Psychology, Punjabi University, Patiala

²Research Scholar, Department of Psychology, Punjabi University, Patiala

*Corresponding Author

Received: June 13, 2025; Revision Received: June 25, 2025; Accepted: June 29, 2025

Keywords: *Adolescents, Rural, Family Climate, Self-Regulation, Gender*

Adolescence, a transitional phase, is marked by rapid but uneven biological, psychological, and social development that coincides with student life, where they prepare themselves for future endeavours and challenges. During this critical juncture, they deal with environmental expectations and hormonal changes that accompany pubertal growth spurt and face a variety of challenges, such as emotional upheaval, conflict with authority figures, identity crisis, alienation, violent crises, drug and alcohol abuse, unsafe sex, academic failure, underachievement, health challenges, and feelings of hopelessness and helplessness (Raffaelli and Crockett, 2003; Gardner and Steinberg, 2005; Gestsdottir and Lerner, 2007, 2008). Individuals exhibit varying capacities to overcome obstacles and achieve success across diverse domains of life, attributable to multiple behavioral, motivational, cognitive, and emotional factors. Amongst all the factors, self-regulation is crucial for adolescents to navigate the complexities of adolescence and function adaptively. While dealing with challenges, adolescents must regulate their behavior to make more informed decisions regarding their interactions with their environment, particularly concerning long-term objectives and achieving success in different domains of life (Brandtstadter, 2007; Steinberg, 2009; Larson, 2011). Moreover, self-regulatory capacities are important for successfully handling academic challenges as they enable students to set specific goals, employ suitable tactics to reach them, and evaluate their strategies. Further, the development of an adaptive identity is a crucial adolescent task that requires strong self-regulatory abilities, as self-regulation promotes the exploration of choices, roles, and beliefs, and also aids in successfully negotiating the peer pressure and challenges associated with identity formation, thus resulting in a more solidified self-identity. Previous studies have consistently shown that adolescent's use of self-regulatory behaviors is positively correlated with positive outcomes, including academic achievement, social and emotional competence, and overall well-being (Miller and Byrnes, 2001; Zimmerman and Schunk, 2001) and negatively correlated with indicators of problematic development, including underachievement, emotional disturbances, violent behavior, sexual risk behaviors, substance abuse, and identity issues (Massey et al., 2008; Gestsdottir et al., 2009; Quinn and Fromme, 2010).

Since the development of self-regulatory capacities depends on contextual factors such as residential area, family climate, and nature of parent-child interactions, all have been considered in conjunction with the progression of child self-regulatory abilities. Although the standardization of education, lifestyle, and improved mass media resources had a homogenizing effect on urban-rural populations, there are still differences among urban-rural communities. In this regard, family is a key developmental asset in affecting children's socio-emotional competencies. The familial structure, norms, and parent-child relationship, together with the beliefs and values, are largely affected by the rural-urban setup and serve as a formative force in a child's development of self-regulation. Rural parents are more conventional and put a lot of emphasis on the development of socio-emotional skills due to their necessity to resolve conflicts and maintain cohesion and resilience in challenging environments. They are also more involved in their children's lives than urban parents because of rural cultural norms that prioritize family and the nature of familial occupations, which require them to work together and be in regular contact with one another. When children participate in regular chores, the early parent-child interactions prepare the children to explore the environment, to acquire knowledge, and to develop autonomy and responsibility, competencies that are particularly important for effectively controlling behavior and gradually regulating learning efforts (Bronson, 2000; Neitzel and Stright,

2003; Robinson et al., 2009; Pino-Pasternak and Whitebread, 2010; Efklides and Misailidi, 2019). It is claimed that capable individuals from the child's social environment provide various forms of support to children's self-regulatory development and strategy use, such as implicit and explicit social models to emulate, direct instruction, scaffolding, guidance and facilitation, feedback, encouragement, and rewards (Martinez-Pons, 2002). Further, they often emulate self-management readiness in children by demonstrating patience, perseverance, resilience, and consistency. Additionally, the structured nature of chores also provides opportunities for goal-setting and self-reflection, allowing children to see the direct outcomes of their efforts, which enhances their ability to delay gratification and make better decisions. Adolescents adhere to family and community norms that align with social approval and acceptance, thus fostering self-regulatory capacities. Thus, organized and predictable home environments and emotionally positive parent-child relationships provide a context that allows for the development of self-regulatory competencies (Brody and Ge, 2001; Lewin-Bizan et al., 2010; Moilanen et al., 2010; Bowers et al., 2011; Grolnick et al., 2002). On the contrary, although urban parents are aware of their children's needs, due to their hectic schedules, there is a lack of interaction between children and parents, which sometimes results in child neglect, which makes urban children more exposed to a wider range of beliefs, values, and peer pressure, which harms their self-regulatory capacities. Further, it has been argued that not only the existence or lack of parental warmth but also when children experience neglect from their parents, they may internalize feelings of worthlessness, which further hinder their ability to manage their cognitions, emotions, behaviors, and impulses effectively (Morris et al., 2007). In line with this evidence, it is hypothesized that Self-regulation would be positively correlated with positive family climate and negatively correlated with negative family climate among adolescents. On the other hand, Karreman et al.(2008) did not find a relation between parental responsiveness and sensitivity and child self-regulation (i.e., compliance, inhibition, and emotion regulation). However, Valcan et al. (2018) demonstrated a small but consistent association of a composite of parental warmth, responsiveness, and sensitivity with child inhibition. Some researchers did not find a relationship between parenting and inhibition (Park et al., 1997; Shamir-Essakow et al., 2004). Despite the growing evidence that self-regulation has important implications for the healthy functioning of adolescents, there has been limited research on how the familial environment shapes their self-regulatory capacities, especially in the rural setup of the Punjab region. Therefore, the present study attempted to explore the association between self-regulation and family climate among rural adolescents.

Gender and Self-Regulation

Boys and girls differ in self-regulating ability due to evolutionary, social, cultural, and family influences. In this regard, a greater evolutionary necessity for females to control their emotional and behavioral reactions in social situations has led to females' higher self-regulation abilities. Girls tend to be more self-regulating than boys due to a combination of traditional gender roles, community expectations, and environmental factors (McClelland et al., 2007; Matthews et al., 2009). The tightly-knit nature of rural communities requires women's adherence to social norms and expectations due to a strong emphasis on maintaining a reputation. This communal oversight leads females to be more mindful of their behavior, emotions, and interactions with others as they are aware that everyone notices their actions. Further, strong family and community support systems provide females with guidance and emotional support, allowing them to develop self-regulation gradually. From an early age, due to the expectations for the self-regulatory behaviors of boys and girls, each gender is socialized through different processes. Parents, specifically in rural setups, expect girls, as compared to boys, to execute a range of jobs from an early age, i.e.,

home chores, and caregiving responsibilities, which demand patience and self-regulatory abilities. Additionally, girls are found to be more accountable for maintaining harmony, peace, and managing interpersonal conflicts within the family by exhibiting appropriate emotions and behaviors. The deep connection and interdependence among extended rural families encourage girls to improve their self-regulation as they negotiate family expectations and duties. Girls in rural homes frequently see how their older women handle family tasks, emotions, and relationships by demonstrating control, patience, and resilience, which instill attributes in young women and promote the development of self-regulation. In line with this, it is hypothesized that Females would be higher on self-regulation as compared to male adolescents. However, there have also been studies that have reported equal levels of behavioral self-regulation among the genders (Kockeritz et al., 2010; Wanless et al., 2013). Therefore, the present study attempted to explore the gender differences among males and females in self-regulation.

Family Climate and Gender

Females often perceive a more positive family climate than males, a difference that can be attributed to several interrelated factors, including socialization patterns, communication styles, and emotional expressiveness within families. Since childhood, rural girls have lived in traditional households where they are expected to significantly contribute to family caregiving roles. In contrast, boys seem to be raised to be less outwardly emotional and more self-reliant. This gendered socialization can lead to girls being more attuned to and valuing interpersonal relationships and emotional connections within the family. Further, females typically exhibit higher levels of empathy and emotional intelligence, which enables them to navigate and interpret family dynamics more positively (Ciarrochi et al., 2001). Rural families put great emphasis on instilling feelings of responsibility to maintain harmonious relationships, emotional connectedness within the family, strongly for girls as compared to boys, which shapes their perception of family life as more cohesive and supportive (Eagly and Wood, 2012). Additionally, rural girls are more engaged in household chores and remain in regular contact with family members as compared to boys, who are socialized to be more independent in handling outdoor jobs and responsibilities. This increased interaction with the home environment can lead to more rewarding and engaging experiences with family members, which can strengthen positive family evaluations among girls. In line with this, it is hypothesized that Females would experience a more positive family climate as compared to male adolescents. However, some researchers found non-significant gender differences in experiencing family climate differently by males and females (Conrade and Ho, 2001; McKinney and Renk, 2011; Shalini and Acharya, 2013; Al-Elaimat et al., 2020) Therefore, the present study attempted to explore the gender differences among males and females in perceiving family climate.

Hypotheses of the study

- **H1:** Self-regulation would be positively correlated with positive family climate and negatively correlated with negative family climate among adolescents.
- **H2:** Females would be higher on self-regulation as compared to male adolescents.
- **H3:** Females would experience a more positive family climate as compared to male adolescents.

METHODOLOGY

Participants

The sample for the present study consisted of adolescents (n=50 males and n=50 females) in the age range of 14-18 years. The sample was drawn from i.e. 9th and 10th grade students of government schools located in rural areas of Patiala and Barnala districts of Punjab, India. (procedure). To establish the genuine responses, only those subjects were included who were willing to participate in the study.

Measures used

The following measures were used to carry out the present study.

- **The Self-Regulation Questionnaire (Brown, Miller & Lawendowski, 1999)** comprises 63 items. The instrument was constructed to measure generic self-regulation, i.e., the ability to regulate one's behavior in a broad range of everyday situations. The questionnaire contains seven subscales, namely, Receiving, Evaluating, Triggering, Searching, Planning, Implementing, and Assessing. The responses are given on a five-point Likert scale, i.e., Strongly Disagree, Disagree, Uncertain or Unsure, Agree, and Strongly Agree. The reliability of the inventory appears to be excellent. Cronbach's alpha of the Self-Regulation Questionnaire (SRQ) is .91 (Bommareddy Sruthi et al., 2022).
- **Family Climate Scale (FCS) by (Dr. Beena Shah, 1990)** consists of 90 items and assesses 10 dimensions of family climate including freedom versus restrictiveness; attention versus negligence; dominance versus submission; acceptance versus rejection; trust versus distrust; indulgence versus avoidance; warmth versus coldness; expectation versus hopelessness; partiality versus fairness and open communication versus controlled communication. There is a 3-point Likert scale marking for negative statements, 0, 1, and 2 for 'always', 'sometimes', and 'never', respectively, whereas it is 2, 1, and 0 for positive statements. The 'positive total score' indicates the 'favorable family climate', whereas the 'negative total score' indicates the 'unfavorable family climate' of the child. The coefficient of reliability for all 10 dimensions ranged from 0.69 to 0.81, indicating it to be a highly reliable instrument to assess the family climate (Varma, 2017; Samhitha and Sreedevi, 2020).

Design & Procedure

A correlational design was used to determine the association between self-regulation and family climate among adolescents who were socialized in rural settings. Prior consent was taken from the concerned authorities of the schools to meet the 9th and 10th class students for data collection purposes during the free class periods. Further, parents of adolescents were contacted at parent-teacher meetings to disclose the study's intent and informed about their wards' volunteer participation. School counsellors and class teachers introduced the researcher to the students in different sections. The researcher highlighted the significance of the study and encouraged their volunteer participation. Furthermore, the initial session with participants focused on rapport building. Ethical considerations of the study were clearly explained during this session, and they were assured of the confidentiality of test results. A total of five groups, each containing twenty-three participants, were formed to collect the data. Tests were administered in two different sessions. In the first session, the participants filled in The Self-Regulation Scale (Brown, Miller, and Lawendowski, 1999) with the following instructions. "You will be given a scale related to self-regulation. There will be a total of 63 items. The questionnaire contains seven subscales namely Receiving, Evaluating, Triggering, Searching, Planning, Implementing, and Assessing. For every statement, you have to express your views by marking a tick on any one cell of the five alternatives. There is

no right and wrong answer and no time limit was kept for this scale, so please give your responses on all items.” After the completion of the first scale, a ten-minute break was given to the participants. Then, the Family Climate Scale (Beena Shah, 1990) was administered in the second session and the participants were instructed as follows. “This questionnaire contained a total of 90 items that assess the family climate on 10 dimensions like freedom versus restrictiveness; attention versus negligence; dominance versus submission; acceptance versus rejection; trust versus distrust; indulgence versus avoidance; warmth versus coldness; expectation versus hopelessness; partiality versus fairness and open communication versus controlled communication. So, on each of the items you have to express your views by making a tick on any one option of the three alternatives given as Always, Sometimes, Never. There is no right or wrong answer. However, you have to complete it as early as possible, so please give your responses on all the items. As the participants had the option of leaving the study whenever they felt so for undefined reasons, nine participants completed the first session and did not report for the second session. The participants were encouraged to express their concerns or ask questions related to the study. While scoring the data using guidelines provided in the manuals, six sets of questionnaires were found incomplete, and the data of 100 subjects were subjected to statistical analyses.

RESULTS AND DISCUSSION

The main objective of the present investigation was to see the relationship between self-regulation and family climate among adolescents. For this purpose, a product-moment correlation method was used.

Table 1: Showing correlation coefficient among self-regulation and family climate (N=100)

Self-Regulation	PFC	NFC
Receiving	.210*	-.354**
Evaluating	.221*	-.268**
Triggering	.253*	-.196
Searching	.227*	-.440**
Planning	.078	-.297**
Implementing	.102	-.277**
Assessing	.278**	-.388**
Total Self-Regulation	.297**	-.518**

Note: PFC- Positive Family Climate & NFC- Negative Family Climate

*Note: **p < .01, *p < .05*

Table 1 presents the coefficients of correlation between self-regulation and family climate. There was a significant and positive association between total self-regulation and favourable family climate, and a significant and negative association was found between total self-regulation and unfavourable family climate. The components of self-regulation, i.e., receiving (r=.210, <.05), evaluating (r=.221, <.05), triggering (r=.253, <.05), searching (r=.227, <.05), and assessing (r=.278, <.01) have a significant positive association with favourable family climate. This means that a favorable family climate promotes a person’s ability to gather and analyze relevant information required to direct one’s actions and decision-making process to achieve specific goals. The rural milieu is distinguished by increased support, and the cohesive structure of rural communities encourages children to explore themselves, communicate openly about problems, and seek guidance and support from family members, which aids in better understanding and internalization of pertinent information. Further, this improves one’s ability to concentrate and process, resulting in

adaptive solutions and decision-making (Efklides, 2011). Additionally, a positive family climate enables an individual to assess their performance and goals more realistically. In rural setups, the family members act as buffers against failures and setbacks; failures are mostly viewed as an opportunity where one can flourish again. So, children can mitigate the effects of stressors, become resilient, and prepare themselves to deal with challenges by keeping a positive attitude and persistence in difficult scenarios (Pomerantz et al., 2007). Once done with the evaluation, a supportive parental role encourages children to initiate change and take necessary steps to engage in proactive and self-improving behaviors. Children in such environments have high self-efficacy and confidence to pursue required steps because parents show confidence and let the child take initiative. Parents reinforce such behaviors by praising and offering autonomy to children (Pino-Pasternack and Whitebread, 2010). Further, parental participation, open dialogue, and modeling of adaptive strategies promote searching for options required for instigation to change and assessment of the implemented plan, and in identifying areas of improvement (Pajares, 2002). On the other hand, components, i.e., planning and implementation, did not show any significant relationship with positive family climate.

Further, receiving ($r = -.354, <.01$), evaluation ($r = -.268, <.01$), searching ($r = -.440, <.01$), planning ($r = -.297, <.01$), implementation ($r = -.277 <.01$), and assessment ($r = -.388, <.01$) were found to be significantly and negatively associated with unfavourable family climate. This means that a lack of familial support in a rural milieu hinders one's ability to search for and adhere to relevant information. Moreover, in close-knit rural communities where family reputation and conformity may carry heightened importance, fear of criticism or failure can further suppress a child's capacity to critically evaluate their goals and progress. Additionally, the negative family climate dramatically hindered children's motivation to change due to a lack of autonomy, guidance, and support, resulting in poor self-efficacy and confidence in their ability to sustain behavioural change. (Hustedt and Raver, 2002). A disorganized or unsupportive home environment in rural areas, where resources and guidance are already limited, and the zest to learn new things is not promoted and modeled, obstructs one's capacity for searching, planning, and implementing plans effectively. (Kallia and Dermizaki, 2017). Furthermore, a lack of constructive appraisal of one's actions and plans get hampered due to a lack of acceptance of failures, hindering one's ability to assess the effectiveness of the plan and adapt accordingly. On the other hand, the triggering component was not significantly associated with a negative family climate.

Furthermore, as depicted in Table No. 1, the overall self-regulation score was found to be positively and significantly ($r = .297, <.01$) correlated with a favorable family climate and negatively and significantly ($r = -.518, <.01$) correlated with an unfavorable family climate. Therefore, the hypothesis was accepted that self-regulation would be positively correlated with a favorable family climate and negatively correlated with an unfavorable family climate among adolescents. This means that in rural setups, a warm, supportive, autonomous, responsive, cohesive, structured, and consistent family and communal context significantly leads to better self-regulatory capacities. Previous studies lend support to present research findings (Mulvaney et al., 2006; Leerkes et al., 2011). Researchers asserted that when children are given autonomy in making choices, decisions, and managing household and agricultural chores in rural areas with appropriate boundaries, they develop a sense of control over their environment. Also, when children are entrusted with age-appropriate responsibilities, they learn to self-regulate their actions to fulfill those responsibilities as competent individuals demonstrate situation-appropriate behaviors via parental instruction, monitoring, and modeling, as well as filtering the specific events to which children are

Self-Regulation, Family Climate, And Gender: A Study of Rural Adolescent Development

exposed (Power, 2004; Kliewer et al., 2006; Bernier et al., 2010). When individuals feel trusted and supported, they experience a lower level of emotional distress, which is essential for self-regulation. Trusting relationships provide a secure base where individuals communicate openly, share goals, and work together towards goals, thus fostering self-regulation (Eisenberg et al., 1999). On the other hand, distrusting relationships create barriers in communication and cooperation, thus undermining self-regulation. When children are constantly supervised and micromanaged, they may rely on external cues and directives to guide their behavior rather than developing self-regulation mechanisms (Hong et al., 2015). Overly restrictive rural environments that put strong emphasis on reputation and conformity may prevent children from facing and overcoming challenges on their own, thus restricting self-regulation capacity. Further, parents with a conservative mindset may fail to notice or acknowledge their children's efforts or achievements, depriving them of emotional support, valuable feedback, and encouragement, which exacerbates feelings of inadequacy and insecurity, undermining adolescents' motivation to self-regulate. (Colman et al., 2006; Karreman et al., 2008). Additionally, research shows that parental warmth, support, and encouragement lead to emotional security in children, and they feel valued and supported in their pursuits. Children in such family environments are confident about their abilities and seek parental guidance and support in the face of adversity or difficult tasks. Conversely, negative reinforcement through criticism, rejection, or indifference further diminishes individuals' confidence in self-regulating behavior as they internalize feelings of failure or unworthiness. Further, researchers posited that realistic expectations enhance goal-setting and provide clarity, guiding an individual's behaviors and decisions toward desired outcomes (Locke and Latham, 2002). Conversely, the absence of clear goals and direction impedes self-regulation, as individuals may struggle to find purpose or meaning in their actions (Emmons et al., 1992). Further, research shows that partiality and fairness in familial interactions profoundly shape self-regulation abilities. When partiality is present, individuals may experience inequitable treatment, leading to feelings of resentment and inadequacy (Cropanzano et al., 2003). This undermines self-regulation as individuals struggle to maintain motivation and confidence in their abilities when faced with perceived unfairness (Tyler et al., 2011). In contrast, fairness fosters motivation and performance by ensuring that efforts are recognized and rewarded equitably. Individuals are more likely to invest energy and resources and better regulate their behaviors to achieve their goals when they believe in the fairness of the family environment. Hence, the present study revealed that the family climate plays a vital role in the development of self-regulation.

Table 2: Means, SDs, and t-ratio of males and females on Self-regulation

Self-Regulation	Gender Male/Female	Number	Mean	SD	t-ratio
Receiving	Females	50	35.42	4.07	5.851**
	Males	50	30.48	4.37	
Evaluating	Females	50	31.66	3.03	3.572**
	Males	50	29.12	4.01	
Triggering	Females	50	30.10	4.69	0.83
	Males	50	29.38	3.95	
Searching	Females	50	33.62	3.54	2.789**
	Males	50	31.22	4.95	
Planning	Females	50	31.46	3.31	1.422
	Males	50	30.42	3.97	
Implementing	Females	50	33.24	3.98	3.743**
	Males	50	29.76	5.23	

Self-Regulation, Family Climate, And Gender: A Study of Rural Adolescent Development

Self-Regulation	Gender Male/Female	Number	Mean	SD	t-ratio
Assessing	Females	50	32.40	3.28	2.276*
	Males	50	30.44	5.13	
Self-Regulation (Total)	Females	50	228.16	15.59	5.113**
	Males	50	210.32	19.12	

Note: **p < 0.01, *p < 0.05

Table 2 presents the t-ratio between male and female adolescents in self-regulation. The findings of the present study reveal a significant difference (t-ratio = 5.11, p < .01) between males (M = 210.32, SD = 15.59) and females (M = 228.16, SD = 19.12), with females exhibiting particularly high self-regulation. This supports the hypothesis and aligns with previous research that girls in rural setups are more likely than boys to act according to social rules, thereby providing girls with more practice and consequently a better ability to regulate their behaviors and emotions (Davis, 1995). In line with this view, meta-analytic studies indicate that girls have greater motivation and ability to engage in self-regulation than boys (Silverman, 2003; Else-Quest et al., 2006). Additionally, gender differences have been reported concerning the habitual use of emotion regulation strategies. For example, girls tend to use problem-oriented strategies—aimed at solving a problem to feel better—more often than boys. In contrast, boys are more likely to emotionally disengage from stressful situations (i.e., emotion-oriented strategies) than girls (Eschenbeck et al., 2007). In this context, self-control and social control theorists argue that females exhibit higher levels of self-control relative to males since females are subjected to greater parental supervision and are more likely to be reprimanded for deviant behaviors (Else-Quest et al., 2006). Specifically, females in rural settings demonstrate lower levels of risk-taking and greater self-regulation due to the interplay of family structures, gender stereotypes, and parental supervision practices. A meta-analysis of parent talk reveals that mothers engage in more conversation and use more supportive speech with their daughters than with their sons (Leaper et al., 1998; Vallotton and Ayoub, 2011). Further, research suggests that parents may socialize boys and girls differently, offering more positive and facilitating socialization for girls (Kuebli and Fivush, 1992; Leaper et al., 1998), which may contribute to girls' advanced self-regulation.

Table 3: Means, SDs, and t-ratio of males and females on family climate.

Family Status	Gender Male/ female	Mean	SD	t-ratio
PFC	Females	62.52	6.25	1.185
	Males	60.52	5.97	
NFC	Females	57.52	9.45	2.311*
	Males	50.74	8.35	

Note: PFC- Positive Family Climate & NFC- Negative Family Climate

Note: **p < 0.01, *p < 0.05

Additionally, as depicted in Table 3, a significant gender difference (t-ratio=2.311<.05) was observed, particularly regarding negative family climate. Females reported higher exposure to negative family climate (M=57.52, SD=9.45 vs. males' M=50.74, SD=8.35; t=2.311, p<.05), suggesting increased sensitivity to familial stresses or stronger parental surveillance. In contrast, male and female adolescents did not differ significantly in positive family

climate. Therefore, the hypothesis was rejected that females would experience a more positive family climate as compared to male adolescents. Rural girls often perceive a more negative family climate than their male counterparts due to a complex interplay of socialization processes, cultural expectations, emotional sensitivity, and family dynamics (Suitor et al., 2017). In rural settings, traditional gender roles are more strongly maintained, often putting additional pressure on girls to comply with expectations about obedience, household duties, and caring from an early age. During adolescence, when independence is most crucial, these obligations can cause feelings of restriction and lack of autonomy in girls. Additionally, rural girls may encounter gender-based favoritism, in which boys are granted greater support and autonomy for their goals, which perpetuates feelings of neglect and unfairness in girls, leading to a sense of negative family climate. Further, rural girls, as compared to boys, are more engaged in household chores and are more involved with family members, increasing their exposure to family stress and conflict. Furthermore, girls put greater value on relationships and emotional connectivity and often demonstrate higher emotional sensitivity and empathy than male adolescents, which makes females more affected by disputes, tensions, and pressure in the family setting. Additionally, they may have heightened expectations for emotional support and communication within the family; when such expectations are unmet, the perceived family climate can become increasingly negative. The differential impact of family dynamics also contributes to this perception. Girls, as compared to boys, are more vulnerable to the adverse effects of family discord, including parental conflict and emotional neglect. These stressors can foster a more critical view of the family environment. Despite more negative home environments, females demonstrate stronger self-regulation, indicating resilience or adaptive coping mechanisms specific to rural girls (Julio et al., 2019; Rende, 2021). In conclusion, schools and community initiatives could assist boys in developing self-regulation skills (for example, through goal-setting workshops), while girls could benefit from stress-management strategies. To create equitable support systems, rural mental health policies must account for gendered inequities in family dynamics.

CONCLUSION

The present study highlights the significant relationship between self-regulation and family climate among rural adolescents, emphasizing that a supportive and positive family environment fosters better self-regulatory abilities, while a negative family climate hinders them. Findings also reveal that female adolescents demonstrate higher self-regulation than males, likely due to socialization processes and communal expectations. Additionally, females reported experiencing a more negative family climate, possibly due to heightened emotional sensitivity and relational expectations. These results underscore the importance of fostering positive familial interactions to support adolescent development. The study has important implications for educators, policymakers, and families, suggesting that interventions promoting a nurturing family environment can enhance self-regulatory capacities, leading to better academic performance, emotional well-being, and resilience among adolescents. Future research should explore longitudinal perspectives and broader socio-cultural influences to deepen our understanding of these dynamics.

REFERENCES

Al-Elaimat, Ali, Majdi Adheisat, and Hesham Alomyan. "The relationship between parenting styles and emotional intelligence of kindergarten children." *Early Child Development and Care* 190, no. 4 (2020): 478-488.

Self-Regulation, Family Climate, And Gender: A Study of Rural Adolescent Development

- Bernier, A., Carlson, S. M., & Whipple, N. (2010). From external regulation to self-regulation: Early parenting precursors of young children's executive functioning. *Child development, 81*(1), 326-339.
- Bowers, E. P., Gestsdottir, S., Geldhof, G. J., Nikitin, J., Von Eye, A., & Lerner, R. M. (2011). Developmental trajectories of intentional self-regulation in adolescence: The role of parenting and implications for positive and problematic outcomes among diverse youth. *Journal of adolescence, 34*(6), 1193-1206.
- Brandtstadter, J. (2007). Action perspectives on human development. *Handbook of child psychology, 1*, 516-568.
- Brody, G. H., & Ge, X. (2001). Linking parenting processes and self-regulation to psychological functioning and alcohol use during early adolescence. *Journal of Family Psychology, 15*(1), 47-69.
- Bronson, M. B., & Bronson, M. (2001). *Self-regulation in early childhood: Nature and nurture*. Guilford press.
- Brown, J. M., Miller, W. R., & Lawendowski, L. A. (1999). The self-regulation questionnaire.
- Ciarrochi, J., Chan, A. Y., & Bajgar, J. (2001). Measuring emotional intelligence in adolescents. *Personality and individual differences, 31*(7), 1105-1119.
- Colman, R. A., Hardy, S. A., Albert, M., Raffaelli, M., & Crockett, L. (2006). Early predictors of self-regulation in middle childhood. *Infant and Child Development, 15*(4), 421-437.
- Conrade, G., & Ho, R. (2001). Differential parenting styles for fathers and mothers. *Australian Journal of Psychology, 53*(1), 29-35.
- Cropanzano, R., Weiss, H. M., Hale, J. M., & Reb, J. (2003). The structure of affect: Reconsidering the relationship between negative and positive affectivity. *Journal of management, 29*(6), 831-857.
- Davis, T. L. (1995). Gender differences in masking negative emotions: Ability or motivation? *Developmental Psychology, 31*(4), 660-667.
- Eagly, A. H., & Wood, W. (2012). Social role theory. *Handbook of theories of social psychology, 2*(9), 458-476.
- Efklides, A. (2011). Interactions of metacognition with motivation and affect in self-regulated learning: The MASRL model. *Educational psychologist, 46*(1), 6-25.
- Efklides, A., & Misailidi, P. (2019). Emotional self-regulation in the early years: The role of cognition, metacognition and social interaction. *The SAGE handbook of developmental psychology and early childhood education, 502-516*.
- Eisenberg, N., Fabes, R. A., Shepard, S. A., Guthrie, I. K., Murphy, B. C., & Reiser, M. (1999). Parental reactions to children's negative emotions: Longitudinal relations to quality of children's social functioning. *Child development, 70*(2), 513-534.
- Else-Quest, N. M., Hyde, J. S., Goldsmith, H. H., & Van Hulle, C. A. (2006). Gender differences in temperament: a meta-analysis. *Psychological bulletin, 132*(1), 33-72.
- Emmons, R. A., King, L. A., & Sheldon, K. (1992). Goal conflict and the self-regulation of action. In D. M. Wegner & J. W. Pennebaker (Eds.), *Handbook of mental control* (pp. 528-551). Prentice Hall.
- Eschenbeck, H., Kohlmann, C. W., & Lohaus, A. (2007). Gender differences in coping strategies in children and adolescents. *Journal of individual differences, 28*(1), 18-26.
- Gardner, M., & Steinberg, L. (2005). Peer influence on risk taking, risk preference, and risky decision making in adolescence and adulthood: an experimental study. *Developmental psychology, 41*(4), 625-635.
- Gestsdottir, S., & Lerner, R. M. (2007). Intentional self-regulation and positive youth development in early adolescence: findings from the 4-h study of positive youth development. *Developmental psychology, 43*(2), 508-521.

- Gestsdottir, S., & Lerner, R. M. (2008). Positive development in adolescence: The development and role of intentional self-regulation. *Human Development, 51*(3), 202-224.
- Gestsdottir, S., Lewin-Bizan, S., Von Eye, A., Lerner, J. V., & Lerner, R. M. (2009). The structure and function of selection, optimization, and compensation in middle adolescence: Theoretical and applied implications. *Journal of Applied Developmental Psychology, 30*(5), 585-600.
- Grolnick, W. S., & Farkas, M. (2002). Parenting and the development of children's self-regulation. In M. H. Bornstein (Ed.), *Handbook of parenting: Vol. 5. Practical issues in parenting* (2nd ed., pp. 89–110). Lawrence Erlbaum Associates.
- Hong, J. C., Hwang, M. Y., Kuo, Y. C., & Hsu, W. Y. (2015). Parental monitoring and helicopter parenting relevant to vocational student's procrastination and self-regulated learning. *Learning and Individual Differences, 42*, 139-146.
- Hustedt, J. T., & Raver, C. C. (2002). Scaffolding in low-income mother-child dyads: Relations with joint attention and dyadic reciprocity. *International Journal of Behavioral Development, 26*(2), 113-119.
- Julio, F., Ribeiro, M. J., Patricio, M., Malhao, A., Pedrosa, F., Goncalves, H., ... & Janeiro, C. (2019). A novel ecological approach reveals early executive function impairments in Huntington's disease. *Frontiers in psychology, 10*, 585.
- Kallia, E., & Dermizaki, I. (2017). Assessing maternal behaviors that support children's self-regulated learning. *Hellenic Journal of Psychology, 14*(2), 83-112.
- Karreman, A., van Tuijl, C., van Aken, M. A., & Deković, M. (2008). Parenting, coparenting, and effortful control in preschoolers. *Journal of Family Psychology, 22*(1), 30-40.
- Kliewer, W., Parrish, K. A., Taylor, K. W., Jackson, K., Walker, J. M., & Shivy, V. A. (2006). Socialization of coping with community violence: Influences of caregiver coaching, modeling, and family context. *Child development, 77*(3), 605-623.
- Kockeritz, M., Klinkhammer, J., & Salisch, M. V. (2010). Die Entwicklung des Emotionswissens und der behavioralen Selbstregulation bei Vorschulkindern mit und ohne Migrationshintergrund. *Praxis der Kinderpsychologie und Kinderpsychiatrie, 59*(7), 529-544.
- Kuebli, J., & Fivush, R. (1992). Gender differences in parent-child conversations about past emotions. *Sex Roles, 27*(11), 683-698.
- Larson, R. W. (2011). Adolescents' conscious processes of developing regulation: Learning to appraise challenges. *New Directions for Child and Adolescent Development, 2011* (133), 87-97.
- Leaper, C., Anderson, K. J., & Sanders, P. (1998). Moderators of gender effects on parents' talk to their children: a meta-analysis. *Developmental psychology, 34*(1), 3-27.
- Leerkes, E. M., Blankson, A. N., O'Brien, M., Calkins, S. D., & Marcovitch, S. (2011). The relation of maternal emotional and cognitive support during problem solving to pre-academic skills in preschoolers. *Infant and Child Development, 20*(6), 353-370.
- Lewin-Bizan, S., Lynch, A. D., Fay, K., Schmid, K., McPherran, C., Lerner, J. V., & Lerner, R. M. (2010). Trajectories of positive and negative behaviors from early-to middle-adolescence. *Journal of Youth and Adolescence, 39*, 751-763.
- Locke, E. A., & Latham, G. P. (2002). Building a practically useful theory of goal setting and task motivation: A 35-year odyssey. *American psychologist, 57*(9), 705-717.
- Martinez-Pons, M. (2002). Parental influences on children's academic self-regulatory development. *Theory Into Practice, 41*(2), 126-131.
- Massey, E. K., Gebhardt, W. A., & Garnefski, N. (2008). Adolescent goal content and pursuit: A review of the literature from the past 16 years. *Developmental Review, 28*(4), 421-460.

Self-Regulation, Family Climate, And Gender: A Study of Rural Adolescent Development

- Matthews, J. S., Ponitz, C. C., & Morrison, F. J. (2009). Early gender differences in self-regulation and academic achievement. *Journal of educational psychology, 101*(3), 689-704.
- McClelland, M. M., Cameron, C. E., Connor, C. M., Farris, C. L., Jewkes, A. M., & Morrison, F. J. (2007). Links between behavioral regulation and preschoolers' literacy, vocabulary, and math skills. *Developmental psychology, 43*(4), 947-959.
- McKinney, C., Milone, M. C., & Renk, K. (2011). Parenting and late adolescent emotional adjustment: Mediating effects of discipline and gender. *Child Psychiatry & Human Development, 42*, 463-481.
- Miller, D. C., & Byrnes, J. P. (2001). Adolescents' decision making in social situations: A self-regulation perspective. *Journal of Applied Developmental Psychology, 22*(3), 237-256.
- Miller, W. R., & Brown, J. M. (1991). Self-regulation as a conceptual basis for the prevention and treatment of addictive behaviours. *Self-control and the addictive behaviours, 3*-79.
- Moilanen, K. L., Shaw, D. S., & Fitzpatrick, A. (2010). Self-regulation in early adolescence: Relations with mother-son relationship quality and maternal regulatory support and antagonism. *Journal of youth and adolescence, 39*, 1357-1367.
- Morris, A. S., Silk, J. S., Steinberg, L., Myers, S. S., & Robinson, L. R. (2007). The role of the family context in the development of emotion regulation. *Social development, 16*(2), 361-388.
- Mulvaney, M. K., McCartney, K., Bub, K. L., & Marshall, N. L. (2006). Determinants of dyadic scaffolding and cognitive outcomes in first graders. *Parenting: Science and Practice, 6*(4), 297-320.
- Neitzel, C., & Dopkins Stright, A. (2004). Parenting behaviours during child problem solving: The roles of child temperament, mother education and personality, and the problem-solving context. *International Journal of Behavioral Development, 28*(2), 166-179.
- Pajares, F. (2002). Gender and perceived self-efficacy in self-regulated learning. *Theory into practice, 41*(2), 116-125.
- Park, S. Y., Belsky, J., Putnam, S., & Crnic, K. (1997). Infant emotionality, parenting, and 3-year inhibition: exploring stability and lawful discontinuity in a male sample. *Developmental psychology, 33*(2), 218-227.
- Pino-Pasternak, D., & Whitebread, D. (2010). The role of parenting in children's self-regulated learning. *Educational Research Review, 5*(3), 220-242.
- Pomerantz, E. M., Moorman, E. A., & Litwack, S. D. (2007). The how, whom, and why of parents' involvement in children's academic lives: more is not always better. *Review of educational research, 77*(3), 373-410.
- Power, T. G. (2004). Stress and coping in childhood: The parents' role. *Parenting: Science and practice, 4*(4), 271-317.
- Quinn, P. D., & Fromme, K. (2010). Self-regulation as a protective factor against risky drinking and sexual behavior. *Psychology of addictive behaviors, 24*(3), 376-385.
- Raffaelli, M., & Crockett, L. J. (2003). Sexual risk taking in adolescence: the role of self-regulation and attraction to risk. *Developmental psychology, 39*(6), 1036-1046.
- Rende, R. (2021). Chores: Why they still matter and how to engage youth. *The Brown University Child and Adolescent Behavior Letter, 37*(6), 1-4.
- Robinson, J. B., Burns, B. M., & Davis, D. W. (2009). Maternal scaffolding and attention regulation in children living in poverty. *Journal of Applied Developmental Psychology, 30*(2), 82-91.
- Samhitha, K., Sreedevi, P., Devi, M. S., & Rani, R. N. (2020). Study on perceptions of the family climate of tribal adolescents in Adilabad District of Telangana. *6*(2), 32-34.
- Shah, B. (1990). Family climate scale. *Agra: National Psychological Corporation.*
- Shah, B. (2001). Manual for Family climate scale. *Agra: National Psychological Corporation.*

Self-Regulation, Family Climate, And Gender: A Study of Rural Adolescent Development

- Shalini, A., & Acharya, Y. (2013). Perceived paternal parenting style on emotional intelligence of adolescents. *Guru Journal of Behavioral and Social Sciences*, 1(4), 194-202.
- Shamir-Essakow, G., Ungerer, J. A., Rapee, R. M., & Safier, R. (2004). Caregiving representations of mothers of behaviorally inhibited and uninhibited preschool children. *Developmental Psychology*, 40(6), 899-910.
- Silverman, I. W. (2003). Gender differences in delay of gratification: A meta-analysis. *Sex roles*, 49, 451-463.
- Sruthi, B., Ravula, S., Jain, R., & Sunkarapalli, G. (2022). Academic Procrastination and Self-Regulation Among College Students. *International Journal of Indian Psychology*, 10(2).
- Steinberg, L. (2009). Commentary: A behavioral scientist looks at the science of adolescent brain development. *Brain and cognition*, 72(1), 160-164.
- Sutor, J. J., Gilligan, M., Peng, S., Jung, J. H., & Pillemer, K. (2017). Role of perceived maternal favoritism and disfavoritism in adult children's psychological well-being. *Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 72(6), 1054-1066.
- Tyler, T. R. (2011). The psychology of self-regulation: normative motivations for compliance. *Explaining compliance: Business responses to regulation*, 78-99.
- Valcan, D. S., Davis, H., & Pino-Pasternak, D. (2018). Parental behaviours predicting early childhood executive functions: A meta-analysis. *Educational Psychology Review*, 30, 607-649.
- Vallotton, C., & Ayoub, C. (2011). Use your words: The role of language in the development of toddlers' self-regulation. *Early childhood research quarterly*, 26(2), 169-181.
- Varma, P. J. (2017). Effect of family climate and parental encouragement on academic achievement of school going adolescents. *International Journal of Indian Psychology*, 4(4), 1-17.
- Wanless, S. B., McClelland, M. M., Lan, X., Son, S. H., Cameron, C. E., Morrison, F. J., & Sung, M. (2013). Gender differences in behavioral regulation in four societies: The United States, Taiwan, South Korea, and China. *Early Childhood Research Quarterly*, 28(3), 621-633.
- Zimmerman, B. J., & Schunk, D. H. (Eds.). (2001). *Self-regulated learning and academic achievement: Theoretical perspectives*. Routledge.

Acknowledgment

The author(s) appreciates all those who participated in the study and helped to facilitate the research process.

Conflict of Interest

The author(s) declared no conflict of interest.

How to cite this article: Kaur, S. & Kaur, H. (2025). Self-Regulation, Family Climate, And Gender: A Study of Rural Adolescent Development. *International Journal of Indian Psychology*, 13(2), 4448-4461. DIP:18.01.395.20251302, DOI:10.25215/1302.395