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AUTONOMY-SUPPORTIVE OR AUTONOMY-THWARTING: THE ROLE OF PARENTING PROFILE IN PREDICTING SELF-REGULATED LEARNING IN INDONESIAN UNIVERSITY STUDENTS

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Abstract

For the past three decades, self-regulated learning (SRL) has been a key focus in educational psychology, with both parenting and teaching strategies playing crucial roles. This study aims to examine the role of Helicopter Parenting (HP) on Indonesian college students' SRL.Sampling was conducted using a non-probability approach, specifically employing a convenience sampling technique. A survey method was used to measure the perceptions of 256 Indonesian college students regarding their parents' parenting profiles using the Helicopter Parenting Instrument – Short Version (HPI-S) and their SRL using the Motivated Strategies for Learning Questionnaire (MSLQ). The results indicate that HP significantly contributes to the development of SRL among Indonesian college students. This finding contradicts most previous studies. However, further analysis suggests that a significant portion of SRL variability remains unexplained by HP and may be influenced by other factors. Culture emerges as a crucial factor deserving attention and is discussed as a key influence on the outcomes of this research.

Keywords: autonomy-supportive, autonomy-thwarting, college students, parenting profile, self-regulated learning

Autonomy-Supportive or Autonomy-Thwarting: Peran Profil Pengasuhan sebagai Prediktor Regulasi Diri dalam Belajar Mahasiswa Indonesia

Abstrak

Regulasi diri dalam belajar atau self-regulated learning (SRL) telah menjadi fokus dalam penelitian psikologi pendidikan selama tiga dekade terakhir, dengan strategi pengasuhan dan strategi pengajaran menjadi dua faktor yang berperan penting dalam perkembangannya. Penelitian ini bertujuan mengkaji peran *Helicopter Parenting* (HP) terhadap SRL mahasiswa Indonesia. Pengambilan sampel dilakukan menggunakan pendekatan non-probabilitas, dengan teknik *convenience sampling*. Survei digunakan untuk mengukur persepsi 256 mahasiswa Indonesia tentang profil pengasuhan orang tua menggunakan *Helicopter Parenting Instrument – Short Version* (HPI-S), dan SRL mereka menggunakan *Motivated Strategies for Learning Questionnaire* (MSLQ). Hasil menunjukkan bahwa HP berkontribusi signifikan terhadap perkembangan SRL pada mahasiswa Indonesia. Hasil ini kontradiktif dengan sebagian besar penelitian sebelumnya, namun analisis lanjutan menunjukkan bahwa terdapat banyak variabilitas dalam SRL yang tidak dijelaskan oleh HP dan mungkin dipengaruhi oleh faktor lain. Budaya menjadi salah satu faktor yang mendapatkan perhatian dan didiskusikan sebagai faktor yang mempengaruhi hasil penelitian.

Kata kunci: dukungan otonomi, mahasiswa, pembatasan otonomi, profil pengasuhan, regulasi diri dalam belajar

INTRODUCTION

The Industrial Revolution significantly influenced education, shifting teaching from teacher-centered to a student-centered approach. This transformation is reflected in curriculum changes aimed at fostering 21st-century skills (Alhamuddin, 2014; Dito & Pujiastuti, 2021; Fitra, 2023; Indrarta et al., 2022). According to Barbour (2019), self-regulated learning (SRL) is one of the most essential 21st-century skills underpinning all other aspects of learning, and its importance is evident in the significantly increasing research trends on SRL over the past three decades (Sulistiawati et al., 2023). Sulistiawati et al. (2023) found that the US is the most productive and influential country in SRL research, and that the keyword 'self-regulated learning' appeared most frequently, occurring 1,766 times. Barbour (2019) emphasizes the importance of developing SRL skills from an

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early age, starting at three years old. Khotimah et al. (2023) found that SRL is a crucial skill that students must develop throughout their education, from early childhood to higher education. This importance is is further highlighted by research findings showing that SRL plays a significant role in highschool students' success in mathematics (Ramayanti et al., 2023), critical thinking and overall academic achievement (Ghimby, 2023), college students' success in computer logic courses (Sibuea et al., 2022), and overall academic success (Basmi et al., 2022). This explains why schools are adapting curricula to help teachers foster SRL through learning and why educator training on SRL-focused teaching strategies is increasingly emphasized (Bolang et al., 2017). tTeachers equipped with the right teaching strategies can nurture and develop students' intrinsic motivation, which supports their SRL (Johansen et al., 2023).

Unfortunately, curriculum alone is not sufficient. Another equally important factor in SRL development is parenting, as education begins at home from an early age and significantly influences an individual's SRL skills later in life (Ahn et al., 2023). A study by Žerak et al. (2024) explored Baumrind's parenting styles and their impact on ninth graders' self-regulated learning (SRL) and found that students with autonomy-supportive parents—democratic or responsive—demonstrated higher SRL. This highlights the crucial role of authoritative parenting in fostering SRL among secondary school students. Wei et al. (2022) studied how parental autonomy support, psychological control, and college students' autonomous regulation and social media dysregulation are correlated, and found that parental autonomy support enhances psychological needs and autonomous learning behaviors. Furthermore, Li (2022) investigated the influence of parenting styles on SRL, distinguishing between autonomy-supportive styles (authoritative and permissive) and autonomy-thwarting styles (authoritarian and uninvolved). The study suggested that parents can choose the most appropriate style to support their children's and adolescents' SRL. Malau et al. (2022) also confirmed that learning motivation and authoritative parenting affect high-school students' SRL, with self-efficacy serving as a mediating factor.

In Indonesia, fostering SRL at home is challenging due to collectivist culture, which emphasizes obedience, hierarchy, and strict adherence to social expectations (Hanif, 2023; Ng & Wang, 2019; Yim, 2022). These cultural characteristics contribute to autonomy-thwarting parenting, which hinders SRL development. Despite awareness among parents, teachers, and policymakers, the most effective strategies to develop SRL remain unclear. This uncertainty leads many Asian parents to adopt Western parenting styles without assessing their suitability for Asian cultural contexts (Al-Ansori, 2023; Napitupulu, 2023). Suprapto et al. (2021) also highlight that Asian countries have been adopting western curricula over the past two decades to meet the need for 21st-century skills, including SRL, despite the lack of comprehensive research considering local wisdom and values.

Self-regulated learning (SRL) is a process in which learners actively regulate their cognition, affection, and behavior in a systematic manner to achieve specific goals (Schunk & Greene, 2018). Individuals with SRL skills can identify and are confident with their competencies, regulate emotions, stay engaged in learning activities, and manage their social and contextual environments, such as selecting comfortable study spaces to achieve their goals (Intes et al., 2024). SRL is rooted in the self-determination theory, which describes a state or condition in which individuals with increasing goals actively engage with their environment, assimilating knowledge, new skills, and integrating them into a clear psychological structure as they pursue their goals (Deci & Ryan, 1985).

The dimensions of SRL are depicted as a cyclical process that students utilize as a guide to thinking and acting before, during, and after completing their tasks. Zimmerman's SRL model identifies three phases of SRL (Zimmerman & Schunk, 2011). The first phase is Forethought, in which students set goals, assess and reassess their motivation and ability to complete tasks, and plan strategies to carry out the task. The second phase is Performance, where students direct their attention, engage in tasks, develop and apply strategies while monitoring their progress. The final phase is Self-Reflection, in which students evaluate their performance and reflect on their tasks.

Deci and Ryan (1985) explain that self-regulation driven by personal interests and values is termed *autonomous self-regulation*, whereas regulation influenced by external demands and factors is referred to as *controlled self-regulation*. Individuals with strong SRL skills can adapt well, become lifelong learners, think critically and creatively,

develop strong problem-solving abilities, and work effectively both independently and collaboratively (Brenner, 2022). Stoeger et al. (2015), Brenner (2022), and Purwarini and Rustika (2018) assert that SRL is a skill that can be developed, even in students with special needs, with parents playing a crucial role in its development from early childhood.

Higgins' (1998) self-regulation model consists of two main components: *regulatory focus*, which determines whether an individual strives to achieve positive outcomes or avoid negative ones, and *regulatory mode*, which relates to the approach towards goals either by progressing forward or carefully evaluating options. These components govern various individual goals. If the focus is on promotion, the individual aims to achieve success and fulfill their desires. Conversely, if the focus is on prevention, the individual prioritizes safety, responsibility, and obligation fulfillment (Higgins, 1998). Higgins et al. (2008) assert that while self-regulation is a universal process, its expression varies across cultures. Although self-regulation operates similarly across individuals, its strength and emphasis are shaped by cultural norms and values. Higgins' model (Higgins, 1998; Higgins et al., 2008) deepens our understanding of self-regulation by demonstrating how cultural concepts shape one's social self-perception. Alvi and Gillies (2020) support the notion that teachers' efforts to foster students' SRL development are highly influenced by the microsystem, exosystem, and macrosystem—including home, school, curriculum, and community—through a reciprocal process.

For individuals who internalize cultural values as part of their personal beliefs and integrate them into their self-system, these values become more autonomous (Ryan & Deci, 2018). By internalizing cultural values and social norms, individuals align their goals and behaviors, thereby enhancing self-regulation skills and motivation within their cultural framework. For instance, in a collectivist culture, Schunk and Greene (2018) observed that when asked about preferred learning activities, students preferred self-regulated instructions but also accepted teacher's control. This suggests that in collectivist cultures, students view teacher control as a natural and acceptable aspect of the classroom environment.

A parenting profile or behavior is a more nuanced form of parenting styles. Parenting styles are typically categorized into two dimensions: demandingness and responsiveness. Diana Baumrind further classified these into four types: authoritative, authoritarian, permissive, and uninvolved/neglectful (Awiszus et al., 2022). Over time, the term 'parenting profiles' emerged. This study examined autonomy-supportive profiles, which include authoritative and permissive styles, fostering intrinsic motivation (Vasquez et al., 2016; Zhang et al., 2017). Second, the autonomy-thwarting profile, which includes authoritarian and uninvolved parenting, involves parents either failing to provide necessary guidance or directing the child to think and behave in specific ways; HP is an example of this (Ahn et al., 2023). In this study, HP was used as a tool to measure the extent to which participants' parents were autonomy-supportive or autonomy-thwarting.

Autonomy-supportive parents provide informative feedback and meaningful choices without displaying a controlling attitude when their children explore their values and interests (R. M. Ryan & Deci, 2018). Various sources indicate that children with autonomy-supportive parents exhibit greater persistence in problem-solving, a stronger sense of competence, and more positive relationships with others (Fousiani et al., 2016; Wei et al., 2022). In contrast, autonomy-thwarting parents, including controlling and strict types, hinder autonomy, reduce well-being, impair career choices, and contribute to problematic behaviors like bullying (Ahn et al., 2023; Hannan & Wahyuningsih, 2022; Johansen et al., 2023; Meyer & Wissemann, 2020; Sarifudin et al., 2020). While parenting profiles were traditionally considered stable, recent studies suggest that they can change. These changes vary and usually occur when children enter early to middle adolescence (Teuber et al., 2022). This was one of the reasons for setting 18 as the minimum age for study participants, based on the expectation that by this age, their parents would have established a more stable parenting approach.

A study by Fuadia (2020) aimed to develop childcare strategies to enhance children's self-regulation in metacognition, motivation, and behavior. The interventions significantly improved children's self-directed learning scores and parental competencies—including knowledge, attitudes, and skills—after parents implemented guidebook-based strategies, effectively enhancing children's self-directed learning outcomes. Wulandari and Swandi (2020) conducted a study during the Covid-19 pandemic to investigate how learning

motivation and authoritative parenting affect SRL, mediated with self-efficacy. This study involved 310 eleventh-grade science students. The results showed that motivation and authoritative parenting influenced SRL, partially mediated by self-efficacy. Another study by Wei et al. (2022) involving 287 Chinese university students found that autonomy-supportive parenting fostered psychological fulfillment, autonomous learning behaviors, and reduced social media dysregulation. Li (2022) examined how different parenting styles affect SRL and found that each style correlated with distinct SRL skills. Based on these findings, Li recommended that parents select parenting styles according to specific SRL needs and dimensions. Another study by Malau et al. (2022) analyzed how learning motivation and authoritative parenting influence SRL, and found that learning motivation and authoritative parenting affect SRL, partially mediated by self-efficacy.

Most SRL research over the past three decades has focused on Western, individualistic cultures, where parents typically encourage children's autonomy from an early age, as stated in a bibliometric analysis study by Sulistiawati et al. (2023). The literature from Western countries has been used as a reference to adapt parenting styles and curricula in Indonesia, with the goal of enhancing SRL skills among Indonesian youth (Al-Ansori, 2023; Napitupulu, 2023; Suprapto et al., 2021). Previous research has primarily focused on the role of teachers and teaching strategies, with limited literature addressing parenting strategies that support SRL development within the Indonesian cultural context (Khotimah et al., 2023; Sulistiawati et al., 2023). A literature review by Khotimah et al. (2023) found that SRL studies in Indonesia generally examined SRL as a predictor of certain behaviors or performance, described students' SRL in specific populations, focused on ways to develop SRL in children or learners, and investigated teaching strategies that foster SRL development. This indicates that research on the factors influencing SRL development in Indonesia remains limited, despite its unique cultural context, where values and norms significantly shape education and child-rearing.

This study raises the question of which parenting profile is most suitable for fostering SRL and whether teaching, educational, and parenting strategies effective in Western countries can be fully adopted in Indonesia. To address this issue, the study examines parenting profiles in Indonesian parents and explores how these profiles predict the development of SRL among Indonesian youth. Specifically, this research focuses on identifying parenting profiles in Indonesian parents and their impact on students' SRL. Based on the background, urgency, and identified problem, the study hypothesizes that (H_1) parenting profiles significantly predict self-regulated learning among Indonesian college students.

METHODS

Research Design, Location, and Time

This study utilizes a quantitative correlational method with a non-experimental cross-sectional design to examine the influence of HP on SRL. Quantitative methods focus on data collection and analysis using numerical variables, emphasizing objectivity and the statistical generalization of research findings (Creswell, 2014). The approach allows relationships between variables to be assessed without manipulating the subjects (Gravetter & Forzano, 2018). The independent variable is Helicopter Parenting (HP) Profile, and the dependent variable is Self-Regulated Learning (SRL). The study was conducted in Indonesia, involving participants from various ethnic groups across the country, and took place between January and June 2024, aiming to support or reject hypotheses through measurable, statistically tested findings.

Sampling Technique

The sample consists of a subset of the population selected based on specific predetermined criteria (Sugiyono, 2017). The sampling technique used was convenience sampling, in which research subjects were chosen based on their availability, ease of access, or proximity to the researcher, rather than through random selection, using various media, including Whatsapp broadcast messages, personal messages to relatives, email, and social media. To anticipate sampling bias, researchers utilized advertisements spread across different social media platforms (Facebook, YouTube, and Instagram) to ensure a more diverse sample. The participants' criteria include undergraduate, master's, and doctoral degree students in Indonesia with minimum age of 18 years old, considering that the brain regions responsible for executive functions including self-regulation, reach maturity and stabilize between the ages of 18 and 25 years (Tervo-Clemmens et al., 2023), making this the

appropriate age range for measuring SRL. The final dataset included 256 participants.

Data Collection Procedures

The questionnaire included informed consent, demographic information, and assessment instruments, and it was administered online using the SurveyMonkey platform. Participants who chose to take part had the option to submit their personal phone numbers, which were used to distribute research incentives in the form of electronic money (IDR 50,000) for 80 participants. The ethical aspects of this research were approved by the Internal Review Board (IRB) of the Center for Research & Community Development (CRCD) at Universitas Pelita Harapan under approval number P-054-FPsi/I/2024.

Measurement and Assessment of Variables

The operational definition of Helicopter Parenting refers to the degree of parental control and involvement in their children's lives, including directing their thoughts and behaviors in specific ways (Vigdal & Brønnick, 2022). The Helicopter Parenting variable was measured using the Helicopter Parenting Instrument – Short Version (HPI-S). The HPI-S scale was developed by Pistella et al. (2020) and later translated into Indonesian by a sworn translator. This scale consists of 10 items, with the item "My parent…" being used in place of "*My mother…*" and "*My father…*" Examples of items include "*My parent tries to make all my major decisions*." and "*My parent feels like a bad parent if I make poor choices.*" Respondents rated their parent's behavior on a scale from 1 (strongly disagree) to 7 (strongly agree) for the 10 items provided. Higher HPI-S scores indicate a greater tendency toward autonomy-thwarting parenting. The translated HPI-S demonstrated good reliability, with an alpha coefficient of 0.84.

The operational definition of Self-Regulated Learning refers to the specific thoughts, behaviors, and actions learners use to control their learning, which are directed toward achieving a set of goals. Participants' SRL was measured using the Motivated Strategies for Learning Questionnaire (MSLQ), developed by Pintrich and De Groot (1990), which was later translated into Indonesian by a sworn translator. After conducting a reliability analysis, some items were removed, resulting in a final translated scale with 12 items for the Motivation scale and 9 items for the Strategies scale. The original version consists of two scales and fifteen subscales, with mean scores from each subscale indicating the participant's level of SRL. Examples of items on the Motivation scale include "*Getting a good grade in this class is the most satisfying thing for me right now*." and "*I want to do well in this class because it is important for me to show my ability to my family, friends, boss, or others*." Examples of items on the Strategies scale include "*I make lists of important terms for this course and memorize the lists*." and "*Even when course materials are dull and uninteresting, I keep working until I finish*." Respondents rated statements related to their motivation to self-regulate and self-regulation strategies on a scale from 1 (strongly disagree) to 7 (strongly agree). Previous studies often treat MSLQ as a multidimensional scale by calculating the mean scores of each of the subscales. However, since Aini and Fatria (2023) confirmed that the MSLQ functions as a one-dimensional construct using the Rasch Model, this study used the total MSLQ score to measure SRL. Reliability analysis yielded alpha coefficients of 0.80 for the Motivation scale and 0.60 for the Strategies scale, confirming the scale's reliability.

Analysis of Data

We conducted a simple linear regression analysis to test the research hypothesis. The collected data were subsequently processed and analyzed using Jeffrey's Amazing Statistics Program (JASP) software, version 0.14.1. The analysis process began with descriptive statistics for the HP (Helicopter Parenting) Total and SRL (Self-Regulated Learning) Total variables, accounting for valid and missing entries. Next, the Durbin-Watson value was checked to confirm no autocorrelation. Following this, the residuals vs. predicted plot was examined to verify homoscedasticity, and the standardized residuals histogram was assessed for normality. Subsequently, the Q-Q plot was reviewed to ensure linearity. With all assumptions met, a linear regression analysis was conducted. After obtaining the results of the necessary analysis, we conducted a regression analysis for the two MSLQ scales to gain a clearer profile for the SRL Motivation and SRL Strategies scales within the population.

RESULTS

General Characteristics of Participants

The study included 266 college students aged 18 to 40 years. Table 1 presents demographic data and responses from measurement

Table 1 Participants demographic charateristics (n=256)

Characteristic	n	%
Age range (years)		
18-20	139	54.3
21-25	52	20.4
26-30	20	7.9
31-35	19	7.5
>35	26	10.4
Ethnic group		
Ambon	7	2.7
Bada	1	0.4
Bali	4	1.6
Banjar	1	0.4
Banten	1	0.4
Batak	48	18.8
Betawi	7	2.7
Bugis	1	0.4
Dayak	5	2.0
Jawa	67	26.2
Klesi	1	0.4
Manehat	1	0.4
Melayu	4	1.6
Minahasa	13	5.1
Nias	24	9.4
Rote	4	1.6
Sabu	3	1.2
Sasak	1	0.4
Sumba	1	0.4
Sunda	19	7.4
Ternate	1	0.4
Timor	5	2.0
Tionghoa	32	12.5
Toraja	5	2.0
Previous education		
Highschool	170	66.4
Bachelor's degree	81	31.6
Master's degree	5	2.0
Parents' Marital Status		
Married	241	94.1
Live together but not married	1	0.4
Live separately but not divorced	6	2.3
Divorced and live separately	8	3.1

Table 2 Variable descriptive statistic (n=256)

	HPTotal	SRLTotal
Valid	256	256
Missing	3	3
Mean	45.352	113.953
Std. Deviation	10.514	12.556
Minimum	13.000	70.000
Maximum	70.000	145.000

Note: HPTotal=Helicopter parenting total; SRLTotal=Self-regulated learning total

questionnaires completed by the participants. After compiling the data, it was found that only 256 participants completed the dataset and were included in the analysis (Table 1).

Helicopter parenting (HPTotal). The mean HPTotal score in Table 2 was 45.352, representing the average score among participants. The standard deviation of 10.514 indicates the degree of variation or dispersion in scores. Scores ranged from 13 to 70, indicating a wide distribution within the dataset.

Self-regulated learning (SRLTotal). The mean SRLTotal score in Table 2 was 113.953, which is higher than the mean HPTotal score. The standard deviation of 12.556 indicates a moderate level of score dispersion. Scores ranged from 70 to 145, reflecting a broad range of self-regulated learning levels among participants.

Normality Test

In Figure 1, the median value is concentrated around the center, indicating that the residuals satisfy the normality assumption and are normally distributed. Figure 2 shows that the data points cluster around the linear line, forming a straight pattern with minimal deviation. This suggests that the data meets the linearity assumption.

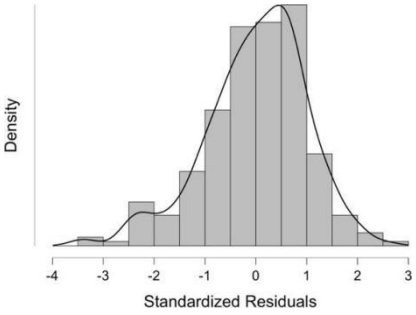

Figure 1 Standardized residuals histogram

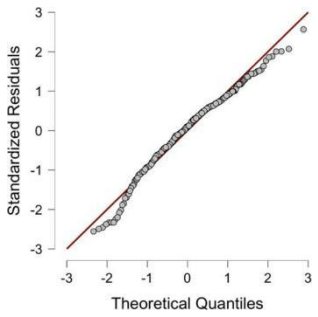

Figure 2 Q-Q plot standardized residuals

Table 3 Results of regression analysis (n = 256)

Model		Sum of Squares	df	Mean Square	F	p
H_1	Regression	1516.167	1	1516.167	9.955	0.002
	Residual	38685.270	254	152.304		
	Total	40201.438	255			

Assumption Test

The assumption test indicates that the Durbin-Watson statistic for the regression model is 1.773, which falls within the acceptable range of 1.5 to 2.5. This suggests no substantial autocorrelation among the residuals. A value close to 2 suggests that the residuals are not significantly correlated, fulfilling the assumption of error independence in the model. Similarly, the Residuals vs. Predicted plot indicates that the points are evenly dispersed and do not display a megaphone pattern. In other words, the data exhibits homoscedasticity, confirming that the assumption of heteroscedasticity is not violated.

Hypothesis Test

The simple linear regression results in Table 3 indicate that the tested regression model (H_1) significantly explains a portion of the variability in SRLTotal. The obtained F-statistic is 9.955 with a p-value of 0.002, indicating that the independent variable in this model, HP, significantly impacts SRLTotal. In other words, the proposed regression model explains SRL variation better than the intercept-only model (i.e., a model without predictors). The statistical significance of the regression model suggests a meaningful relationship between HP and SRL. This indicates that H_0 was rejected and H_1 was supported, demonstrating that HP significantly contributes to explaining the variability in self-regulated learning (SRL) among participants.

The R^2 value in the Durbin-Watson autocorrelation test represents the proportion of total variability in the dependent variable (SRL) that can be explained by the independent variable (HP). For hypothesis H_1 , the R^2 value is 0.038, indicating that HP, classified as autonomy-thwarting parenting, explains approximately 3.8% of the variation in SRL. In practical terms, this means that HP accounts for only a small portion (3.8%) of the differences observed in SRL, while the remaining 96.2% of the variation in SRL is explained by other factors not included in the model. This suggests that HP has a modest effect on SRL, and there may be other important variables influencing SRL that were not considered in this analysis.

The regression equation representing the relationship between these variables can be expressed as Y = c + BX. In this context, the regression equation was SRL = 103.435 + 0.232HP. This means that for each one-unit increase in the HP score, the SRL score is expected to increase by 0.232 units, assuming all other variables remain constant.

Tables 4 and 5 indicate significant differences in the V66 mean values between SRL Motivation (M = 63.535, SD = 6.621) and SRL Strategies (M = 50.418, SD = 7.549). The t-test (t(510) = 20.902, p < .001) highlights SRL Motivation as the dimension most affected by Helicopter Parenting, suggesting that HP has a stronger influence on motivation than strategies.

Table 4 SRL Motivation scale and strategies scale descriptive statistics (n=256)

	V66	
	SRLM	**SRLS**
Valid	256	256
Missing	0	0
Mean	63.535	50.418
Std. Deviation	6.621	7.549
Minimum	41.000	27.000
Maximum	82.000	63.000

Table 5 SRL motivation scale and strategies scale Independent samples t-test result (n=256)

	Test	Statistic	df	p
V66	Student	20.902	510	< .001
	Mann-Whitney	59715.000		< .001

DISCUSSION

These data analysis results confirm the significant impact of the parenting profile, in this case, helicopter parenting (HP), on self-regulated learning (SRL) among Indonesian college students. This finding is notable because it suggests that in Indonesia, HP, classified as autonomy-thwarting parenting, has the potential to enhance SRL. This contrasts with previous studies, which indicate that autonomy-thwarting parenting can hinder the development of an individual's SRL. However, since the model explains only a small portion of the total variability (as indicated by the low R^2 value), a substantial part of SRL variability remains unexplained by HP and may be influenced by other factors not considered in this analysis.

Since the small R^2 value indicates a significant amount of variability in SRL that remains unexplained by HP and may be influenced by other factors, cultural factors emerged as a key area of interest. The demographic data of this study indicates that 66.8% of the participants belong to the Java (26.2%), Batak (18.8%), Chinese-Indonesian (12.5%), and Nias (9.4%) ethnic groups, which highly value seniority, devotion to authority, and the role of parents as central figure who expect their descendants to adhere to established rules and traditions (Hakim et al., 2012; Lase & Rusli, 2024; Lubis & Buana, 2020; Wilda et al., 2023). This cultural background more clearly illustrates how culture significantly impacts the development of Indonesia's SRL profile, as supported by various literature sources (Higgins et al., 2008; Ryan & Deci, 2018; Jaramillo et al., 2017) that discussed the influence of culture on SRL profile and how SRL profiles differ based on cultural backgrounds. According to Higgins's model, if an individual's self-regulation focuses on positive outcomes and development, they would aim for success and achievement. On the other hand, if one's focus is on prevention, one would prioritize safety, responsibility, and fulfilling obligations (Higgins et al., 2008). Furthermore, Higgins et al. (2008) emphasized that while self-regulation is a universal process, cultural differences reveal that the strength of this system is shaped by cultural norms and values. Higgins's model helps illustrate how the participants' cultural background shapes their SRL profile.

The finding that autonomy-thwarting parenting helps developing SRL can be further explained by Ryan and Deci, who found that the application of one's values becomes more autonomous when they internalize cultural values as part of their personal values, integrating them into their self-system (Ryan & Deci, 2018). Embracing cultural values helps individuals align their goals and behaviors with societal norms, fostering self-regulation that integrates personal objectives within the dominant cultural framework for harmony. A literature review by Jaramillo et al. (2017) emphasizes the importance of incorporating cultural considerations into the study of self-regulation research. This review explores how cultural values influence children's self-regulation development, shaping theoretical views, educational objectives, and parenting, emphasizing its culturally contextualized nature and variations across societies. Furthermore, Deci and Ryan (1985) identified two types of self-regulation that support this discussion. When self-regulation is based on personal interests and values as the foundation of behavior, it is termed as autonomous self-regulation. Conversely, when self-regulation is based on interpersonal demands and regulated by external factors, it is referred to as controlled self-regulation. Based on this categorization and the findings of this study—where Helicopter Parenting supports SRL development among Indonesian students—Indonesian SRL appears to align with controlled SRL.

The present was also aimed at seeking a deeper understanding of participants' SRL profiles and identified significant differences between their motivational SRL and strategic SRL scales. Participants whose parents score higher on HP display stronger motivation to regulate learning, largely because they perceive full support, clear expectations, and sufficient guidance from their parents. This perceived support fosters a sense of confidence and encouragement, leading to increased motivation to achieve academic goals. This additional finding is further

supported by Trommsdorff (2009), who elaborated that the expectations of significant individuals form a crucial part of children's value systems, guiding them to refine their self-regulation strategies in alignment with their cultural environments. As children strive to meet their caregivers' expectations, they internalize social values and norms that reflect their family's cultural context, and this process helps them interpret others' intentions, motivations, and behaviors while also shaping and reinforcing their self-regulation (Jaramillo et al., 2017). Therefore, parental control plays a role not only in children's overall self-regulation development (Isufi & Haskuka, 2024) but also in shaping individual differences in selecting and applying regulation strategies in specific contexts (Díaz & Eisenberg, 2015).

While students with HP parents often exhibit strong motivational SRL, their SRL strategies may be underdeveloped due to a lack of practice. This gap arises because HP parents frequently adopt a hands-on approach, assuming many academic responsibilities for their children (Ryan et al., 2024). Consequently, students may struggle to develop essential learning management skills, such as goal-setting, planning, and strategy adjustment. These findings align with Chong's (2007) study on 7th-grade students in Singapore—comprising Chinese, Malay, Indian, and Eurasian participants—which explored how family, community, and societal expectations shape students' self-concept, cognition, and self-regulation. Chong found that fear of failure, a characteristic of collectivist cultures, positively correlates with SRL, driving students to employ cognitive and metacognitive strategies to meet parental and societal expectations. This suggests that while collectivist cultures strongly influence SRL motivation, they do not always foster SRL strategy development. Cross-cultural research by Xu et al. (2023) further supports this notion, showing that while SRL strategies significantly enhance academic achievement, their effectiveness varies across cultures. In Anglo-Saxon individualist cultures, SRL strategies have a strong positive impact on learning outcomes, whereas in East Asian collectivist cultures, their effectiveness is less pronounced.

The discussion highlights several implications, including the need to view SRL as culturally nuanced, incorporating both universal and culture-specific elements (Masaki, 2023; Zhou, 2020). In Indonesia, SRL instruction should prioritize self-regulation strategies over autonomy, as collectivist cultural perspectives on autonomy differ. Furthermore, parental education should align with local cultural values, as Western approaches may not effectively foster SRL development in Indonesia.

This study has several limitations, including sample size. While sufficient, the sample size could be improved by increasing the number of participants to enhance representativeness and strengthen statistical analysis. Additionally, sample bias is a potential issue, the broad age and education range may not accurately represent the population studied, particularly due to the use of online questionnaires. Furthermore, time constraints were another limitation, as data collection took longer than anticipated.

CONCLUSION AND SUGGESTION

The study reveals that helicopter parenting (HP) positively affects self-regulated learning (SRL) in Indonesian students, differing from findings in Western contexts. While HP explains part of SRL variability, other factors remain influential. Further analysis highlights that cultural context is pivotal, emphasizing that SRL cannot be universally defined but must be examined through specific cultural lenses. In Indonesia's collectivist society, autonomy develops differently compared to individualist cultures, emphasizing societal norms and expectations. These findings highlight culturally specific parenting's role in shaping SRL and provide insights for stakeholders—parents, educators, and practitioners—to foster SRL through appropriate parenting strategies. This research underscores the need for culturally grounded approaches to enhance SRL in children.

Further research is needed to comprehensively explore the role of culture as a mediating and/or moderating variable in understanding how parenting affects children's SRL development, as well as its impact in adolescence and adulthood. Investigating children's perceptions of control as a mediating and/or moderating variable is also crucial for gaining deeper insights into this dynamic. Additionally, cross-cultural studies are essential for gaining more comprehensive insights into the impact of culture on children's self-regulation in learning processes. By gaining a deeper understanding of the relationship between collectivist culture and SRL development, this study offers more profound insights into how cultural and parenting factors interact and influence

children's self-regulation in learning. Understanding parenting practices that foster SRL in the Indonesian cultural context will enhance home-school collaboration in SRL education, ultimately strengthening SRL skills among Indonesian children and youth.

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