Achievement Motivation among Students in Indonesia: What is the Role of Teacher-Student Relations, Peer Relations and Moderation of Collectivist Culture?

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Abstract

Although there is much research related to students’ achievement motivation, there is still very little research involving social relations at schools and the role of culture in these studies. This research analyses the relationship between teacher-student relations, peer relations, and achievement motivation, as well as whether collectivist culture moderates the relationship between teacher-student and peer relations on achievement motivation. Data was collected using a questionnaire adapted from the Student Teacher Relationship Scale (STRS), the Quality of Relationships Inventory (QRI) Scale, the Individualism-Collectivism Scale (ICS), and an achievement motivation scale. Data analysis used multiple regression analysis and the F. Hayes moderation test. An unexpected finding from this research is that the collectivist culture does not significantly moderate the relationship between teacher-student relations and achievement motivation; the collectivist culture does not significantly moderate the relationship between peer relations and achievement motivation, even though collectivist culture should have a strengthening effect on social relations of achievement motivation. The research results provide essential findings; namely, an indication of the transformation of cultural dimensions in the Z Generation who were participants in this research, so that the cultural dichotomy of individualism and collectivism becomes meaningless in the relationship among teacher-student relations and peer relations with achievement motivation. This research provides essential information on the development of science and future researchers to conduct a more comprehensive study of the dichotomy of the cultural dimensions of individualism and collectivism by involving two countries with different cultural backgrounds because cultural transformation is possible.
INTRODUCTION

Motivation plays a vital role to achieve excellent academic results; someone with high motivation will have energy to move towards achieving their goals and maintain them to get maximum results (Goleman, 2017; Awan et al., 2011; Singh, 2011). According to Pintrich and Schunk (2002), motivation is essential in learning, whereas lack of motivation is a big challenge. Besides that, lack of motivation is also cause of the decline in educational standards (Brown, 2005; Awan et al., 2011). Today's challenge in the learning and education process is how to develop and increase students' motivation so that they have enthusiasm for learning and achieving academic achievement.

Research on student achievement motivation has been carried out but has not been comprehensive. Several previous studies put too much emphasis on internal variables as predictors (e.g., Zhang et al., 2015; Bhatt, 2018; Moyano et al., 2020; Arafah et al., 2020) so that achievement motivation is seen only from one side as internal needs and drives without paying attention to the social variables that influence it—for example the theory of McClelland (Acquah et al., 2021). Furthermore, research on perspective of Western individualistic culture has been minimal. Too little is known about how achievement motivation occurs and what factors are associated with changes in achievement motivation in Eastern collectivist cultures (Wu et al., 2021). This research was conducted in Indonesia which was explained in Hofstede's cultural that Indonesia is a country that applies collectivism, where individuals prioritize group needs and goals over individual interests (Pasteruk, 2020).

Furthermore, several studies have shown that different cultural dimensional orientations, such as individualism and collectivism, have been proven to have different impacts on achievement motivation behavior (Heine et al., 2001; Greenfield et al., 2000; Salili, 2009; Kim & Choi, 2005; Cho et al., 2013). In addition, recent research shows that achievement motivation consists of two different motivation systems, namely social-oriented achievement motivation and individual-oriented achievement motivation, which are constructions of differences between Eastern and Western cultures (Tao & Hong, 2014).

Concerning education, modern cultural psychology increasingly emphasizes how identity differences and specific cultural socialization practices can influence students' motivation and achievement at school (Eccles, 2009; Trumbull & Rothstein-Fisch, 2011). The main difference is between socialization practices anchored in more individualistic cultural traditions and those anchored in more collectivist cultural traditions (Triandis & Suh, 2002). Some research suggest that, in more individualistic countries such as the United States, extrinsic motivation is associated with lower academic achievement (Deci & Ryan, 2002), whereas in more collectivistic cultures such as Hong Kong, receiving rewards from others may be seen as more positive (Moneta & Siu, 2002). Besides that, the research found that in Asian and Latin
American adolescents who were collectivist, achievement motivation happened due to social factors oriented toward their family. In contrast, achievement motivation is a matter of their needs in individualistic American adolescents. Moreover, achievement motivation in collectivist cultures does not prioritize competition but collaboration (Fuligni, 2001; King et al., 2012).

So far, not much research related to achievement motivation has used social relationship variables as predictors, whereas the perspective of expectancy-value theory (Eccles, 2005; Eccles, 2009; Wigfield & Eccles, 2000) explained that according to Wigfield et al. (2012), students' relationships with teachers and peers known as the social environment influence academic disparities and then shape abilities. A person's expectancy and values are related to achievement motivation. Likewise, Bronfenbrenner's bioecological theory (1979), according to Kohl et al. (2013), explains that the environmental context influences human development. The individual's behavior or attitude will shape the reciprocal relationship between a person and his/her environment. In addition, several research experts have found that the relationship between teachers and students can have a positive impact on several things, including student adaptation to current and future school, student engagement, excellent academic function, preventing learning boredom, improving performance and increasing student motivation (Wubbels et al., 2016; Martin & Collie, 2019; Hamre & Pianta, 2001; Henry & Thorsen, 2018; Roorda et al., 2011; Koca, 2016).

Likewise, peer relations are a strong predictor of achievement motivation and student success at school (Wang & Eccles, 2012; Juvonen & Knifsend, 2016; Li et al., 2020); students who feel appreciated and respected by classmates are more likely to report adaptive achievement motivation, this adaptive achievement motivation is related to sound quality friendships who value academics, whereas poor quality friendships and perceiving classmates to be resistant to school norms are related to reports of maladaptive achievement motivation (Nelson & Debacker, 2008). It has been proven by several previous studies that peer relations are a strong predictor of students' achievement motivation at school (Tongsilp, 2013; Best et al, 2015; Bakadorova & Raufelder, 2016; Li et al., 2020).

Therefore, this research aims to determine whether teacher-student and peer relations significantly predict achievement motivation. This research also wants to determine whether collectivist culture significantly moderates the relationship among teacher-student relations, peer relations, and achievement motivation. This departs from the basis of several studies that show that collectivist culture is a moderator of teacher-student relations, peer relations, and achievement motivation. For example, research conducted by Cheng and Lam (2013), Tao and Hong (2014), and Xu et al. (2023) found that students in collectivist cultures experience extrinsic motivation; for example, students obtain a bachelor's degree in order to get a job as their parents expect, so in collectivist cultures, motivation is often correlated with social goals, and besides,
perseverance has more positive relationship with achievement in East Asian cultures than Western cultures. Based on these differences, researchers involved collectivist culture as a moderator in this study.

People in collectivist cultures will collaborate in achievement motivation behavior due to social factors oriented toward their family (Salili, 2009; Fuligni, 2001). This indicates that a culture of collectivism moderates or strengthens teacher-student relations and peer relations with achievement motivation. However, other research finds that positive teacher-student relationships are essential in collectivist cultures and necessary in individualist cultures. Research results (Raufelder & Mohr, 2011; Korir & Kipkemboi, 2014; Bakadorova et al., 2020) found that collectivistic culture does not act as a moderator of the relationship between teacher-student relations and achievement motivation, it means that in both individualistic and collectivistic cultures teacher-student relations are equally important predictors of achievement motivation. Korir and Kipkemboi (2014) also found that peer relations are essential in individualist and collectivist cultures, so collectivist culture has not been proven to moderate the influence of peer relations on achievement motivation.

**METHODS**

**Research Design**

This research is a correlational type of quantitative research. The research aims to determine whether there is a relationship between teacher-student relations, peer relations, and achievement motivation and whether collectivist culture strengthens the relationship between teacher-student relations and peer relations with achievement motivation.

**Participant**

The study covered the entire population of junior high school students in East Java, Indonesia. A total of 317 junior high school students from various regions in East Java were sampled. Respondents were listed through social media announcements, and the study used snowball sampling techniques. Questionnaires are disseminated through Google Forms, and participants are encouraged to share recruitment information with other students in their network.

**Procedure**

All participants in this research were willing to become respondents voluntarily without compensation. First, the researcher asked for the respondent's consent to fill out the questionnaire and explained the procedures for filling it out. Furthermore, respondents who agreed filled out a questionnaire to measure peer relations, collectivism culture, and achievement motivation via Google form distributed on WhatsApp and Instagram social media platforms.
**Data Collection**

Data collection in this study used questionnaires from the adaptation process following Beaton et al. (2000) standards. The adaptation flow begins with translating the scale into the Indonesian language by two translators, then the two translation results are synthesized to obtain agreement on the translation results and then translated back into the original language scale until a shared meaning is obtained. After that, the scale is reviewed by an expert. Only then was the scale tested on a small sample to see the understanding of the item sentences and on a large sample to see its validity and reliability (Beaton et al., 2000). The data was collected by distributing questionnaires online to State Junior High School students in Indonesia. The questionnaire distributed was the Achievement Motivation scale developed by the researcher to measure the Achievement Motivation variable. The Student-Teacher Relationship Scale (STRS) measures students' relationships with their teachers (Pianta, 2001). The Quality of Relationships Inventory (QRI) measures the Peer Relations variable. The Individualism-Collectivism Scale (ICS) was used to measure the level of collectivism in participants.

**Achievement Motivation Scale**

The researcher compiled the achievement motivation scale by referring to the expectancy-value motivation aspect of Wigfield and Eccles (2002), which consists of (1) Choice aspect: individuals choose to be involved in academic tasks rather than non-academic tasks; (2) Persistence or tenacity in performance tasks; when facing challenges such as difficulties, boredom, or fatigue, individuals will be more tenacious in completing their tasks; and (3) Physical effort or cognitive effort.

Scoring was carried out using a Likert scale ranging from 1-5, with the highest score for each item being 5. A high score indicates that students have a high tendency towards academic task choice indicators and are tenacious in achievement tasks and physical and cognitive effort, which indicates a high level of student achievement motivation. The instrument test results showed a Cronbach's Alpha value of 0.828. Meanwhile, the results of confirmatory factor analysis showed a loading factor value ranging from 0.423 to 0.751, and all goodness of fit parameters (Probability, GFI, AGFI, CFI, TLI, NFI, RMSEA, and RMR) meet the criteria, fit measurement model.

**The Student-Teacher Relationship Scale (STRS)**

The Student-Teacher Relationship Scale (STRS) consists of two dimensions: conflict and closeness. The original version of the instrument yielded scores on Conflict and Closeness and had excellent psychometric properties across various studies and samples (Pianta, 1992), including internal consistencies of .86 – .89 in MTP samples and predicted children's classroom behavior, school retention, and academic outcomes (Hamre & Pianta, 2001; Pianta, Steinberg, & Rollins, 1995). Meanwhile, the STRS instrument test carried out by researchers on State Junior High School students in Indonesia showed an alpha coefficient of 0.771, and the loading factor value of all items...
met the loading factor criteria above 0.4, with the goodness of fit parameters meeting the criteria for a fit measurement model.

**Quality of Relationships Inventory (QRI) Scale**

The Quality of Relationships Inventory (QRI) scale consists of three dimensions: support, conflict, and depth of relationship. The original version of this instrument had an alpha coefficient of 0.826 (Pierce et al., 1991). Meanwhile, the loading factor value is above 0.4 and shows an acceptable fit index (Hooper et al., 2008). Previous studies reported that this instrument is valid and reliable for their countries. Meanwhile, the QRI instrument test carried out by researchers on State Junior High School students in Indonesia showed an alpha coefficient of 0.827, and the loading factor value of all items met the loading factor criteria above 0.4, with the goodness of fit parameters meeting the criteria for a fit measurement model.

**Individualism-Collectivism Scale (ICS)**

The Individualism-Collectivism Scale (ICS) consists of four dimensions: self-identity, goal priorities, modes of social relations, and acceptance of norms. Previous studies using multifaceted individualism-collectivism scales often had low internal consistency reliabilities of 0.67, 0.80, 0.70, and 0.68 for Source of Identity, Goal Priority, Mode of Social Relationships, and Acceptance of Norms (Kim & Cho, 2011). Meanwhile, the results of confirmatory factor analysis on the second half of the sample showed an excellent fit index for the second-order structure with four aspects as latent indicators of the individualism-collectivism construct, with a range of factor loading values ranging from 0.40 to 0.82 (Kim & Cho, 2011). Meanwhile, the ICS instrument trial conducted by researchers on State Junior High School students in Indonesia showed an alpha coefficient of 0.754, and the loading factor value for all items met the loading factor criteria in the range of 0.538 to 0.797 with the goodness of fit parameters meeting the criteria for a fit measurement model.

**Data Analysis**

Data were analyzed using multiple regression analysis and moderation analysis with the Macro F. Hayes formula with the help of IBM SPSS 24 software to determine whether collectivist culture moderates the relationship between teacher-student relations, peer relations, and achievement motivation and how much and how the moderating effect occurs.

**RESULTS**

**Descriptive Demographic Analysis Based on Age and Gender**

The respondents in this study consisted of 317 junior high school students in East Java, Indonesia, whose age range was 12-13 years (Class VII), 13-14 (Class VIII), and 14-15 years (Class IX).
Based on Table 1 above, it was known that 317 people comprises of 21.8% of respondents were 12 years old, 28.4% were 13 years old students, 21.8% were 14 years old students, and 28.1% were 15 years old students. Based on this, it can be seen that most of the respondents were 13-year-old students who were early adolescents.

The table showed that of the 317 students, 45.7% of the respondents were male, and 54.3% of the respondents were female. Based on this, it can be concluded that most of this study's respondents were female.

Based on Table 1, it can also be seen that most respondents came from Surabaya, that are 124 students (39.1%); 74 students (23.3%) are from Malang, 53 students (16.7%) are from Sidoarjo; and 45 students (14.2%) are from Pamekasan; the rest came from Jember (5 people); Banyuwangi (four people); Madiun and Pasuruan, three people of each; and Lumajang, Sumenep, and Sampang, two people each. Based on this data, it can be concluded that the majority of respondents in this study came from urban areas.

**Hypotheses**

Multiple regression analysis is used to answer hypothesis 1) There is a relationship between teacher-student relations, peer relations, and achievement motivation; 2) There is a relationship between teacher-student relations and achievement motivation; and 3) There is a relationship between peer relations and achievement motivation.
The results of the statistical analysis in Table 2 are shown simultaneously. A significant positive relationship exists between the two predictor variables, namely teacher-student relation and peer relations, with student achievement motivation ($F = 97.867$; $p = 0.000$). This research proves that teacher-student and peer relationships significantly predict student achievement motivation. The influence of the two predictor variables is 38.4% on students' achievement motivation, while other variables influence 61.6%.

Table 3 shows the partial test results, with a significant positive relationship between teacher-student relations and student achievement motivation ($\beta = 0.477; t = 6.726; p = 0.000$). It means that the more positive the students' assessment of their relationship with their teacher, the higher the motivation they get; conversely, the more negative the students' assessment of their relationship with their teacher, the lower their motivation. Likewise, the peer relations variable significantly influences students' motivation for achievement ($\beta = 0.371; t = 7.919; p = 0.000$). It means that the higher the peer relationships, the higher the student's achievement motivation; conversely, the lower the peer relationships of the students get, the lower the student's achievement motivation. Thus, teacher-student and peer relations variables can be used to predict student achievement motivation.

**Moderation of Collectivist Culture on The Relationship between Teacher-Student Relations and Student Achievement Motivation**

Moderation analysis using F. Hayes shows that the interaction effect between collective cultural values and teacher-student relationships is not significant, so the possibility of a moderation effect occurring is minimal ($b = 0.0062$, CI 95% [-0.0234, 0.0358], $p = 0.6799$). The interaction between the two variables, collective cultural values and teacher-student relationships, only provides an effective contribution of 0.04% in the model.
From the scatter plot and linear regression line, it can be concluded that a small moderation effect is likely to occur. This can be shown from the gradient of the regression line between people with high, medium, and low collective cultural values, which is straight.

**Moderation of Collectivist Culture on The Relationship between Peer Relationships and Student Achievement Motivation**

Furthermore, the interaction effect between collective cultural values and peer relationships is insignificant, so the possibility of a moderation effect occurring is minimal \((b = -0.0171, \text{CI 95%} [-0.0369, 0.0027], p = 0.0902)\). The interaction between the two variables, collective cultural values, and teacher-student relationships, only provides an effective contribution of 0.64% in the model.

**Table 4**

<table>
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<th>Collective</th>
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<td>0.0000</td>
<td>0.3382</td>
<td>0.5636</td>
</tr>
</tbody>
</table>

From the conditional effect of the focal predictor at values of the moderator(s) table, the correlation between peer relationships and achievement motivation is slightly higher for people with low collective cultural values, but the difference is trivial.
Based on Graph 2 shown from the scatter plot and linear regression line, it can be concluded that the moderation effect is minimal. Even though there is an intersection among the three lines, the effect is only trivial where people with high, medium, and low collective cultural values are almost in a straight line.

**DISCUSSION**

The research results show a relationship between teacher-student relations and peer relations with achievement motivation, both simultaneously and partially. This research empirically proves the expectancy-value theory (Eccles, 2005; Eccles, 2009; Wigfield & Eccles, 2000). According to Eccles et al. (2006), the social environment, such as parents, teachers, and peers, significantly impacts the formation of individual expectancy and values about achievement motivation. The results of this research are based on Bronfenbrenner's bio-ecological theory. According to Bronfenbrenner (1979), a person's achievement motivation develops through reciprocal interactions with the sociocultural environment built by various systems. The most influential include the family, peer group, and school context (Bronfenbrenner & Ceci, 1994). Therefore, the results of this study prove that Bronfenbrenner's (1979) bio-ecological theory has been proven empirically, that students' relationships with parents, teachers, and peers are significant predictors of students' achievement motivation at school.

This study also supports previous research conducted by Flanagan, Erath, and Bierman (2008) and Raufelder and Mohr (2011), who found that students' relationships with peers and teachers positively affected their motivation to achieve. Another study by Bakadorova et al. (2020) also found that students viewed their peers and teachers as sources of motivation (Hoferichter et al. 2014). The importance of teacher and student
relationships on motivation based on the Expectancy-Value theory perspective was also emphasized by Wigfield et al. (1998). Wigfield et al. (2012) state that students' relationships with teachers and peers are essential to academics and shape a person's abilities, expectancies, and values. Excellent and positive relationships with teachers and peers will provide positive messages about individual expectancies and values, ultimately shaping their motivation to achieve.

Additionally, it has been identified that peer relationships are a strong predictor of school compliance, more than support from teachers or parents (Wang & Eccles, 2012). Students accepted by their peer groups report more significant results in academic activities and have more positive perceptions about school. It makes students more actively participate in learning activities and impacts higher educational attainment (Ladd et al., 2009).

Several of these explanations support the results of this research, where children's social relationships with teachers and peers are proven to be a significant predictor of achievement motivation. So far, most existing research has focused on the internal side as a predictor and views achievement motivation only as an internal need without paying attention to external factors. Therefore, it is hoped that the results of this research can contribute to increasing information about the importance of paying attention to children's social relationships with teachers and peers to increase students' achievement motivation at school. This research provides empirical evidence for several of the theories described above. Moreover, it also provides implications and contributions to the development of science, especially in research on achievement motivation, which explicitly examines achievement motivation from external factors, namely social factors with teachers and peers.

Furthermore, the study shows that collectivist culture did not significantly moderate the relationship between teacher-student relationships and achievement motivation, nor between peer relationships and achievement motivation. The findings of this study are consistent with Flanagan, Erath, and Bierman (2008) and Raufelder and Mohr's (2011) research that teacher-student relationships and student-peer relationships in schools are social contexts that positively affect achievement motivation, both in individualistic and collectivistic cultures, so that collectivism cultures do not significantly moderate the relationship between teacher-student relationships, peer relations, and motivation. In addition, research by Korir and Kipkemboi (2014) also confirms that in individualistic and collectivistic cultures, relationships with teachers and peers are equally essential and positive.

In contrast to the findings above, several previous studies reported that achievement motivation differs in the cultural context of individualism-collectivism (Heine et al., 2001; Greenfield et al., 2000; Salili, 2009). Individualism-collectivism cultural orientation affects motivation and behavior differently (Kim & Cho, 2011; Cho et al., 2013). Societies with collectivist cultures are characterized by solid group ties,
like working together, collaborating, being harmonious, and prioritizing group interests above personal interests (Hofstede & Hofstede, 2005). People in collectivist cultures like to work together, collaborate, and be family-oriented (Salili, 2009; Fuligni, 2001). Thus, teacher-student and peer relations in collectivist cultures should strengthen or increase motivation for academic achievement more than in individualist cultures.

This unexpected finding raises the question of why collectivist culture does not moderate the relationship between teacher-student and peer relations with achievement motivation. Based on the theoretical basis and results of previous research, it is stated that a collectivist culture should strengthen social relations with achievement motivation. However, one unexpected, exciting finding in this research was that the researchers found indications of a more individualist cultural transformation in Generation Z. of cultural transformation in Generation Z. According to Stillman (2017), Generation Z is a generation born between 1995 and 2012, also called the net generation or internet generation.

The transformation of cultural values in Generation Z was also classified by Tolstikova et al. (2020) in their research, which found that Generation Z is an inferior generation (less sociable, immature, internet-dependent, unenthusiastic, and individualistic). The study of Tolstikova et al. (2020) shows that Generation Z considers self-expression to be the most significant value, which is purely individualistic. The characteristics of social behavior and achievement motivation that occur in Generation Z show behavior with extreme individualistic values, where they tend to pursue individual personal goals, needs, and rights over others; individuals are motivated by their own goals without caring about others (Hamamura, 2012).

According to Maulana (2021), generation Z has changed the face of Indonesian culture to use the word "I" rather than "us" (more individualism). This is strengthened by research (AdReaction, 2017) showing that social media users in Generation Z in Indonesia cause them to do not want to interact with people around them ultimately, and tends to make them more individualistic. Besides that, data from the 2021 Central Bureau of Statistics reports that 27.94% of Indonesia's total population (270 million people) falls into the Generation Z category. They spend 3.5 hours accessing the internet on their cell phones daily, around 13% more. It is longer than the average millennial (Tirto Media Research, 2017). One of the reasons why Generation Z tends to be more individualistic is due to excessive use of gadgets and social media. Research results from various countries report that the extreme use of social media and the internet has led to a cultural shift to become more individualistic in Generation Z in Pakistan. This makes Generation Z vulnerable to isolation, limiting themselves to private spaces/rooms and neglecting opportunities to interact with close family members, thus making Generation Z more individualistic, even though Pakistan's Generation Z was raised in a predominantly collectivist society (Jamal, 2020).
Culture can transform in unpredictable directions. Cultural transformation can occur due to ecological, economic, and historical factors. More profoundly, other factors influence cultural transformation, namely economic development, residential mobility, language use, and population migration, as research conducted by Shin et al. (2022) found culture and language to be changed in Telok Melano, Sarawak, Malaysia due to the impact of toll road construction which resulted in increasingly advanced economic change and ultimately a shift in language and culture. Meanwhile, Sachs' modernization theory explains that a nation's modernization development can change its culture to become individualistic, which means that the more modern a nation is, the more individualistic the culture (Nhema & Zinyama, 2016).

A recent study showed that among 2,025 employees at an Indonesian state-owned company, there was a shift in values among Indonesian employees from collectivists to individualists (Mangundjaya, 2013). Other evidence, namely an empirical study of 1,455 workers in four large cities, revealed several new values among respondents, one of which was individualism (Sihombing, 2013). Furthermore, another study on the transmission of values between generations in three generations in Germany and Indonesia also showed that the Indonesian sample was less individualistic than the German sample. However, individualistic values were transmitted higher in the Indonesian sample (Albert et al., 2009).

An important finding from this research is that collectivist culture does not moderate the relationship between teacher-student relations and peer relations and achievement motivation, meaning there is no difference between collectivist and individualistic cultures regarding the importance of teacher-student relations and peer relations on achievement motivation. This happens because there are indications that there has been a transformation in the cultural dimensions of Generation Z in this research, which has become more individualistic, as explained above, so it does not rule out the possibility that the more modern Indonesian society, the more developed the economy, the more sophisticated technology will make Indonesian society more individualistic. In the end, the collectivist identity of Indonesian society was no longer the original identity of Indonesian society. Moreover, the dichotomy of the cultural dimensions of individualism and collectivism in cross-cultural research and the development of science needs to be reviewed and become a severe concern of future research.

CONCLUSION

The results showed that teacher-student and peer relationships were essential predictors of motivation to excel in school. Nevertheless, relations between them are not moderated by collectivist culture. This shows that, in both collectivist and individualist, excellent and positive social relationships are equally important in supporting students' academic success and increasing student achievement and motivation. Therefore, it is
essential to pay attention to the positive relationships between teachers and students and the good and positive relationships between students and their peers to increase student achievement and motivation in school.

This study provides unexpectedly essential findings related to the indication of cultural dimension transformation in Generation Z, which is more individualist. However, researchers are also aware of limitations in this study, including the number of respondents and the research area, which is only one area of East Java, as well as moderation analysis that may also need improvement for future researchers. Thus, the suggestion for future researchers is to pay attention to the number of respondents and involve the population of the wider region. It would be better if the following study were carried out by comparing two countries so that the study's results allow for a more comprehensive viewing of cultural differences across countries and a moderation analysis that may be even stricter.

In general, the results of this study provide practical information about the importance of teacher-student relations and peer relations to increase student achievement motivation in schools. It is essential to consider teachers, students, parents, or education policymakers to make efforts to create good, positive, and mutually supportive social relations in schools between students, teachers, and peers to achieve success and motivate student achievement at school to be even better. The results of this study have provided empirical evidence that there is no difference between individualist culture and collective culture related to the importance of teacher-student and peer relations with achievement motivation, meaning that both cultures recognize the importance of sound and positive social relations to support student academic success and increase student achievement motivation in school.
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