



The Moderating Role of Academic Self-Efficacy in the Relationship between Social Comparison and Hypercompetitiveness : The Different Effects Among Urban and Rural Group Students in Indonesia

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Abstract: This study aims to explore the relationship between social comparison and hypercompetitiveness, and the moderating effects of academic self-efficacy. In addition, we also compare the different effects among urban group students and rural group students. This study used a non-experimental design with a quantitative approach. The final participants included 146 high school students aged between 15-18 years. There are three instruments used in this study: the Hypercompetitiveness in Academic Scale (HIA) for measuring hypercompetitiveness, the Iowa-Netherlands Comparison Orientation Measure (INCOM) for measuring social comparison, and the Academic Self-Efficacy Scale (TASES) for measuring self-efficacy specific in academic setting. All of the data questionnaires were analyzed by descriptive, correlation, and moderation analysis. The result shows that academic self-efficacy plays a significant role in the association between social comparison and hypercompetitiveness. In addition, the relationship between these three variables is different for urban and rural students. Taken together, these findings can provide theoretical and practical guidance for teachers, counselors, and school psychologists to understand hypercompetitiveness characteristics among students, increase their awareness about hypercompetitiveness characteristics, and provide support through counseling or training that can encourage collaborative work among students and improve their academic self-efficacy.

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Introduction

In urban society, competitiveness and a higher degree of individuality are nearly inescapable (Pan et al., 2013). Previous studies showed that urban individuals are more individualistic even if the country adheres to a collectivist culture that prioritizes the harmonization of interpersonal relations (Du et al., 2015; Singelis et al., 1995). This condition is probably caused by a shift of values in urban regions resulting from globalization, economic pressures, increased assets in cities, and others (Deas & Giordano, 2001; Spurr et al., 2019). Furthermore, theoretically, these highly individualistic and competitive values will influence school students in urban areas to tend to be more self-oriented (prioritizing personal interests), while children in rural areas tend to be more group-oriented (prioritizing group interests and harmony) (Broesch et al., 2011; Liu et al., 2018; Park & Peterson, 2010).

In Indonesia, data shows residents who migrate to urban areas perceive competition as higher than in rural areas (Asyah, 2019). In addition, migrants in urban areas continue to increase by 5% annually, which means that the level of competition in cities also continues to increase every year (Badan Pusat Statistik, 2019). Jobs are also increasingly industrialized, requiring human resources with high knowledge and skills (Peraturan Pemerintah Republik

Indonesia Nomor 34 Tahun 2009, n.d.). Individuals who strive to go to college or get a job must enter situations that are inherently competitive because there are more applicants than there are positions available. This condition causes urban residents to be more competitive in self-development in order to get decent jobs, including self-development through education. However, Badan Pusat Statistik (2021) shows that education is still unequal in rural and urban areas of Indonesia. More than 80% of the best-quality schools and universities are located in cities. Students in urban areas show higher performance and competitive culture in order to maximize their chances of continuing their education and getting appropriate jobs (Ganda, 2022). Academic achievement is also higher in urban schools, such as Jakarta and West Java (Badan Pusat Statistik, 2021). Academic achievement, in the form of the percentage of residents who have successfully completed compulsory education, in urban areas is much higher compared to rural areas in Indonesia (Badan Pusat Statistik, 2021).

Based on this phenomenon, the competitiveness trait which is defined as the tendency of individuals to prioritize individual competence and have a high desire to win, is actually needed (Bhawsar & Chattopadhyay, 2015; Ryckman et al., 1997). Competitiveness trait has positive impacts such as maximizing performance (Elliot et al., 2018) and increasing internal motivation (Reese et al., 2022). However, the competitiveness trait also leads to hypercompetitiveness which is aggressive and detrimental to others. The concept of hypercompetitiveness developed through Horney's theory (1937) which defined hypercompetitiveness as an individual's tendency to always compete and has desire to win in various situations to maintain self-worth. According to Horney (1937), characteristics of a hypercompetitive individual include wanting to win at any cost in order to maintain his or her feelings of superiority. Thus, hypercompetitive individuals may fear that if they lose a competition, others may discover they lack of ability and are, therefore, inferior.

Even though hypercompetitiveness has been discussed since the 1930s when Karen Horney wrote about the neurotic individual, it has only been empirically measured since 1990a after the development of the Hypercompetitive Attitude Scale (HCA) (Ryckman et al., 1990). Afterward, (Bing, 1999) explained that hypercompetitiveness should be examined in specific settings, such as educational settings. The possible explanation is that education, especially education levels that are transitional, such as high school level which is a transition to higher education, creates demands for students to compete with each other (Weissman et al., 2022; Yoon et al., 2020). In addition, the educational setting also creates opportunities for competition because students are assessed simultaneously, therefrom their awareness and self-regulation to compete have developed (Bing, 1999; Dimitrova & Dimitrova, 2017).

Specifically, hypercompetitiveness in academics refers to the individual's need to compete and win at all costs and not accept defeat in any form (Bing, 1999). Individuals with high hypercompetitiveness judge that being better than others is the main goal (Chan et al., 2018; Dagnino et al., 2021). There are several factors related to individual hypercompetitiveness, one of the most salient factors is social comparison. Social comparison refers to the tendency of individuals to compare themselves with others regarding certain aspects to evaluate the individual's own condition (Festinger, 1957). There are two aspects of social comparison: 1) Ability refers to comparing abilities or behaviors (How am I doing?) and 2) Opinion refers to comparing opinions or thoughts (What shall I think?). Social comparison ability is more competitive because it focuses on performance, while social comparison opinion is more non-competitive because it focuses on similarities on thoughts, not on differences that lead to conclusions about who is superior (Yang et al., 2018a; Yang & Robinson, 2018b). The tendency to compare with other people will be higher if individuals interact with people who are similar to them or are in the same conditions as themselves

(Callan et al., 2015; Festinger, 1957; Schneider & Schupp, 2014), for example, in the class situation. Individuals compare themselves with others to evaluate their abilities and thoughts, improve performance, and increase self-esteem (Schneider & Schupp, 2014).

Research about hypercompetitiveness and social comparison is still quite limited. However, there are two studies that have proven the relationship between social comparison and hypercompetitiveness. Liu et al. (2021) proves that social comparison has a positive relationship with hypercompetitiveness. These results are due to both social comparison and hypercompetitiveness involving related interpersonal evaluation processes. In addition, it was also found that social comparison ability has a stronger relationship with hypercompetitiveness; where this finding is in accordance with previous research that the social comparison ability aspect is more competitive than the opinion aspect. In addition, every aspect of social comparison is related to hypercompetitiveness (Yang & Robinson, 2018). This finding is also consistent with the previous research that the correlation of social comparison ability is stronger than the opinion aspect (Liu et al., 2021). Thus, it is important to involve each aspect of social comparison as an independent aspect.

On the other hand, Spurk et al. (2019) indicate that social comparison and hypercompetitiveness are not always significantly related, especially in academic settings. Hypercompetitiveness also depends on the individual's own beliefs regarding his ability to complete academic tasks and challenges (Bing, 1999). When individuals are confident in their academic abilities, self-comparison with others does not significantly affect their tendency to compete (Bing, 1999). This is because the evaluation results can be used more wisely and individuals are better able to compete in a healthy and not excessive way. Thus, this study also involves a moderator variable, namely academic self-efficacy to fill the gap between previous research explain the phenomenon of hypercompetitiveness resulting from the characteristics of urban areas.

Therefore, this study aims to explore the relationship between social comparison and hypercompetitiveness. In addition, this study also investigates the moderating role of academic self-efficacy in the relationship between social comparison and hypercompetitiveness which is assumed to be different among urban and rural group students in Indonesia. Based on that, our research will be able to fill the literature gap about predictors of hypercompetitiveness specifically in educational settings and become the baseline for any intervention to buffer the negative effect of hypercompetitiveness in students.

Research Method

This study used a non-experimental design with a quantitative approach. To recruit potential respondents, we used an accidental sampling method. We post the link to our survey on several social media so that any high school students who are interested in participating will have access to the link. The final participants included 146 high school students aged between 15-18 years ($M = 16.72$, $SD = 2.54$) from the urban area category and rural area category. There were three instruments used in this study. First, the Hypercompetitiveness in Academic Scale (HIA) developed by (Bing, 1999) contains 18 items unidimensional for measuring the degree of hypercompetitiveness. HIA has been adapted for this research to Bahasa Indonesia through four stages of adaptation; translation, back translation, expert judgment, and tryout. Second, the Iowa-Netherlands Comparison Orientation Measure (INCOM) was developed by Gibbons and Buunk (1999) to measure social comparison. INCOM contains nine items that Verysa has already adapted (2020). There are two subscales that measure different and independent (but still related) two aspects; ability scale and opinion scale. Third, the Academic Self-Efficacy Scale (TASES) was developed by Sagone

and De Caroli (2013). TASES contains 25 items and has been adapted by Darmayanti et al. (2021). All the questionnaires were analyzed using R Studio version 2023.06.2+561. First, we calculated descriptive statistics and correlations between variables. Then, we conducted an independent sample t-test, correlation, and moderation analysis to test the hypothesis of this study.

Results and Discussion

An independent t-test analysis was carried out to see differences in the level of hypercompetitiveness between students from urban and rural areas. Results showed there was a significant difference in the level of hypercompetitiveness between students from urban and rural areas where students from urban areas ($M=80.04$) had a higher level of hypercompetitiveness than students from rural areas ($M=74.63$). Furthermore, Table 1 presents the correlation coefficients of all the research variables. Based on the result, social comparison was associated with a higher level of hypercompetitiveness ($r=0.46$, $p<0.001$). Specifically, only social comparison ability ($r=0.07$, $p<0.05$) is positively related to hypercompetitiveness. Apart from these two variables, none had a significant relationship with academic self-efficacy.

Table 1. The Correlation between Research Variables

No		Mean	SD	1	2	3	4	5
1	Hypercompetitiveness	77.37	12.68					
2	Social Comparison	29.34	5.24	.678**				
3	SCO-Ability	13.73	3.43	.264**	.019			
4	SCO-Opinion	15.43	4.25	.124	.045	.567		
5	Academic Sell-Efficacy	129.2	11.18	.025	.056	.138	.047	

Note. SCO-Ability=social comparison ability, SCO-Opinion=social comparison opinion.

Urban Area Group Analysis

Correlation analysis showed that there is a positive and significant relationship between SCO-ability and hypercompetitiveness ($r=0.21$, $p<0.005$). Meanwhile, there is no significant relationship between SCO-opinion and hypercompetitiveness ($r=0.04$, $p=0.092$).

Next, moderation analysis was performed to test the interaction effect. Table 2 shows that there is an interaction effect between social comparison and academic self-efficacy in predicting hypercompetitiveness ($p<0.05$) where high self-efficacy weakens the relationship between social comparison and hypercompetitiveness. Then there is also an interaction effect between SCO-ability and academic self-efficacy in predicting hypercompetitiveness ($p<0.05$) where high self-efficacy also weakens the relationship between SCO-ability and hypercompetitiveness. Meanwhile, there is no interaction effect between SCO-opinion and self-efficacy ($p=0.89$). The details of the moderation relationship are presented in Figure 1.

Table 2. Moderation Analysis of Urban Area Group of Students

(Intercept)	SE	t	p
Social Comparison* Academic Sell-Efficacy	.010	-2.492	.015*
SCO-Ability* Academic Sell-Efficacy	.014	-3.028	.003*
SCO-Opinion* Academic Sell-Efficacy	.026	-.134	.894

Note. SCO-Ability=social comparison ability, SCO-Opinion=social comparison opinion

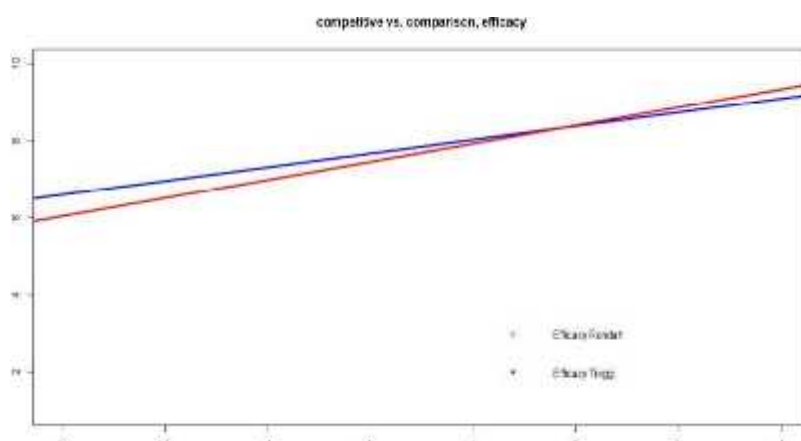


Figure 1. Interaction Effect of Academic Self-Efficacy and Social Comparison
Rural Area Group Analysis

Correlation analysis showed that there is a positive and significant relationship between SCO-ability and hypercompetitiveness ($r=0.57$, $p<0.05$), and also between SCO-opinion and hypercompetitiveness ($r=0.47$, $p=0.005$). Next, moderation analysis was performed to test the interaction effect in groups of students from rural Indonesia. Table 3 shows that there is no interaction effect between any variables, both between social comparison and academic self-efficacy in predicting hypercompetitiveness ($p=0.326$), SCO-ability and academic self-efficacy in predicting hypercompetitiveness ($p=0.857$), and SCO-opinion and self-efficacy ($p=0.89$). The detail of the moderation relationship is presented in Figure 2.

Table 3. Moderation Analysis of Rural Area Group of Students

(Intercept)	SE	t	p
Social Comparison*Efikasi Diri Akademik	.021	-.990	.326
SCO-Ability* Efikasi Diri Akademik	.036	-.181	.857
SCO-Opinion* Efikasi Diri Akademik	.026	-.134	.894

Note. SCO-Ability=social comparison ability, SCO-Opinion=social comparison opinion

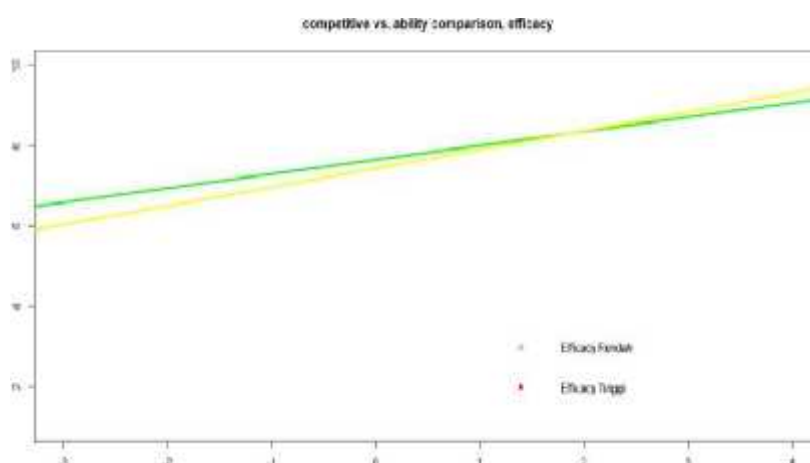


Figure 2. Interaction Effect of Academic Self-Efficacy and Social Comparison

Discussion

The characteristics of urban and rural areas are different, where urban areas tend to be more individualistic, self-oriented, and have high desire to compete in various aspects, including education (Deas & Giordano, 2001; Du et al., 2015; X. Liu et al., 2018; Pan et al.,



2013; Spurk et al., 2019). This condition can be seen in higher academic achievement and more qualified schools in urban areas compared to rural areas. Better facilities in urban areas are also aligned with the need for higher quality human resources so that the community's desire to be competitive is increasing in obtaining limited employment opportunities. The results of this study also prove that the level of hypercompetitiveness in urban students is significantly higher than the students in rural areas. In accordance with the results of previous studies, hypercompetitiveness in the city is higher than in the village which is a unique characteristic of urban areas (Zhang & Zhao, 2021).

Regarding the relationship between social comparison and hypercompetitiveness, this study proves there is a significant relationship between the two variables in groups of students from urban and rural areas. This result is in line with the previous research that social comparison is a factor that can influence hypercompetitiveness because these two variables involve the same process of related interpersonal evaluation (Liu et al., 2021). However, in the group of students from urban areas, there was no significant relationship between SCO-opinion and hypercompetitiveness. This is probably caused by the individualistic values that exist in urban residents (Du et al., 2015; Singelis et al., 1995) so they do not consider it important to have similarities in thoughts or opinions. In accordance with previous research, SCO-opinion is the non-competitive aspect of social comparison (Yang et al., 2018a; Yang & Robinson, 2018b), while characteristics in urban areas are highly competitive. Thus, SCO-ability which focuses on comparing abilities or achievements, is more relevant in the urban context.

Furthermore, this study proves that there is a significant interaction between social comparison in general and academic self-efficacy in predicting hypercompetitiveness, as well as an interaction between SCO-ability and self-efficacy in predicting hypercompetitiveness. In accordance with the previous study, the relationship between social comparison and hypercompetitiveness is also influenced by other variables that may act as moderator variables, namely academic self-efficacy (Spurk et al., 2019). In addition, this research proves that academic self-efficacy only plays a significant role as a moderator in urban areas. There is no previous research that explains these differences, but the possible explanation is students in urban areas are more influenced by social comparison and academic self-efficacy on their hypercompetitiveness; meanwhile students in rural areas are less influenced by social comparison and have a lower degree hypercompetitiveness characteristic (Bing, 1999). Therefore, academic self-efficacy is a less important factor for the hypercompetitiveness characteristics in rural students.

In sum, the present study has several advantages in completing research gaps related to hypercompetitiveness in urban areas. First, this study looks at two groups at once so that we are able to discover the differences in hypercompetitiveness between urban and rural students. Second, this study expands the explanation of the phenomenon of hypercompetitiveness which is not only related to individual tendencies in conducting social comparisons but also to individual self-efficacy in the academic itself. Thus, this research certainly adds renewal in explaining the phenomenon of hypercompetitiveness in the academic field which is still very rarely researched, especially in urban and rural contexts, as well as expanding understanding of other variables that can also explain this phenomenon.

On the other hand, this present study still has limitations which can also be suggestions for further research. First, participants are limited to only a few rural and urban areas. It would be better for further research to increase the number of participants from different regions in Indonesia. Second, this study has not considered other educational



characteristics, such as the types of schools in Indonesia and the level of education or grade of high school which might affect the level of hypercompetitiveness of the students.

Conclusion

The result of this study proves that social comparison has a positive relationship with hypercompetitiveness both in general and from every aspect, but the social comparison opinion aspect was only found positively correlated with hypercompetitiveness in rural students. Furthermore, this study also shows a moderating effect of academic self-efficacy, but it was only found in groups of students in urban areas. This means that students in urban areas with high academic self-efficacy are able to counter the negative effect of social comparison to hypercompetitiveness. Meanwhile, the effect of social comparison itself might be irrelevant in students from rural areas because they have a lower degree of social comparison and hypercompetitiveness than students in urban areas. The difference in these results can also be seen from the comparison of the mean hypercompetitiveness scores which are already significantly different between groups of students from urban and rural areas. Thus, the results of this study indicate that there are indeed characteristics that lead to differences in the level of hypercompetitiveness of students in urban and rural areas of Indonesia in the academic field.

Recommendation

Based on the result of this study, the following recommendations are offered: (a) Future research is highly recommended to investigate further the role of academic self-efficacy in hypercompetitiveness. (b) Students should exercise their academic self-efficacy through success experience and verbal persuasion because academic self-efficacy is a crucial factor in buffering the social comparison effect on hypercompetitiveness. (c) The teachers, counselors, or school psychologists should increase their awareness about hypercompetitiveness characteristics and provide support through counseling or training that can encourage collaborative work among students.

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