Comparison of Students' Social Interaction Perception between Gold Quest Mode and Cyber Hack Mode on the Blooket Platform in Sociology Learning Class XI at SMA Negeri 11 Makassar

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Abstract

The use of the Blooket platform in game-based learning presents a mechanism of competition and interaction between players that has the potential to be related to students' social experiences. This study aims to describe and compare students' perceptions of associative and dissociative social interactions on the use of Gold Quest and Cyber Hack modes in Sociology learning in class XI at SMA Negeri 11 Makassar. The study used a descriptive-comparative quantitative approach involving 32 students in grade XI B. Data were collected through a five-level Likert scale questionnaire that measured the perception of associative and dissociative social interaction in both game modes. Data were analyzed using descriptive statistics, while the internal consistency of the instrument was examined using Cronbach's Alpha. The results showed that the average perception of associative social interaction in Gold Quest was 3.32, higher than Cyber Hack of 3.06. Meanwhile, the average dissociative perception in Gold Quest was 2.04 and Cyber Hack was 2.00. At the indicator level, Cyber Hack scored higher in wanting to retaliate against other players' actions and tension due to competition, while Gold Quest was higher in sharing strategies and cooperation between students. These findings show that there is a variation in the perception of social interaction based on game modes, although these differences cannot be interpreted as cause-and-effect relationships. This study provides implications for educators to consider the characteristics of game mechanisms in managing students' social interaction experiences during Blooket-based learning.

Keywords: *Blooket, Cyber Hack, Gold Quest, Associative Social Interaction, Dissociative Social Interaction.*

A. INTRODUCTION

Sociology learning at the senior high school (SMA) level is not only oriented towards mastering concepts and theories about people's lives, but also provides space for students to understand and experience the process of social interaction in the learning environment. Social interaction is a reciprocal relationship between individuals and groups that takes place through communication and social actions, so it has an important role in shaping patterns of relationships, cooperation, and dynamics between students. In the context of Sociology learning, interaction between students is part of the learning experience that allows students to develop the ability to communicate, participate, and understand the social responses of other individuals. Ludianti et al. (2023) show that social interaction models can be integrated into the planning and implementation of Sociology learning, including through the use of

digital learning media. However, Wulan et al. (2024) identified a number of obstacles in Sociology learning, such as lack of cooperation between students, low participation of some students, and limited interactivity during the learning process. These findings show that social interaction is an aspect that needs to be considered in the implementation of Sociology learning, not only as a material learned, but also as a social experience that takes place among students. Therefore, understanding the dynamics of social interaction in learning activities is important to identify how students build relationships, respond to the actions of friends, and perceive social experiences that arise during learning activities.

Social interactions that take place in the learning environment can be divided into two main forms, namely associative and dissociative social processes. Associative social interaction is a process that leads to the strengthening of social relationships through cooperation, accommodation, and assimilation, while dissociative social interaction includes competition, contravention, and conflict that arises due to differences in interests and responses between individuals. Oktavianti and Arifin (2022) identified that the social interaction of high school students in the use of social media shows both forms, with associative processes reflected through cooperation and accommodation and dissociative processes through competition, contravention, and opposition. In line with these findings, Assawal and Awaru (2023) show that the use of digital technology is related to changes in the form of students' social interaction, both in cooperation activities and competition and contravention. Meanwhile, Sofiana and Ahmad (2024) show that dissociative social interaction is a phenomenon that can be studied through students' perceptions and experiences in the school environment. In the context of learning, associative interaction can be reflected through mutual help behavior, providing support, sharing strategies, and building familiarity, while dissociative interaction can be shown through the tendency to protest, blame, retaliate against the actions of friends, and feel tension or light conflict. However, competition does not always develop into conflict because students' social responses can differ according to the situation and characteristics of the activities they follow. Therefore, understanding these two forms of interaction is an important foundation for examining how students perceive social relationships while participating in learning activities that involve elements of cooperation and competition.

The development of educational technology encourages the use of game-based learning as a learning approach that not only emphasizes mastery of the material, but also provides space for the formation of social interaction between students. Through game activities, students can engage in various social experiences, such as communicating, working together, strategizing, and facing competition to achieve game goals. Sujarwo et al. (2023) show that the development of interactive gamification-based Sociology learning can support the collaboration skills of grade XI students, especially in building a cooperative orientation during learning. In line with these findings, Gymnastiar et al. (2025) revealed that the application of game-based learning in Sociology learning has the potential to encourage active engagement,

collaboration, empathy, and critical reflection of students through interactive learning experiences. In addition, Solichah et al. (2025) show that there is an increase in students' social interaction through the use of educational game media, which reinforces the relevance of play activities in the development of social relationships in the learning environment. However, game mechanics do not always produce a uniform social experience because elements of competition, reward, and interaction between players can elicit different responses according to the game situation. These activities are conceptually potentially related to the emergence of associative social processes, such as cooperation and support, as well as dissociative, such as competition, contravention, and tension. Therefore, the characteristics of game mechanics need to be considered in understanding how learners perceive the social interactions that take place during game-based learning activities.

One of the game-based learning platforms that allows the emergence of social interaction between students is Blooket. This platform integrates question-answering activities with various game mechanisms, such as collecting points, awards, competition, and interaction between players, so that learning activities are not only oriented towards academic achievement, but also present social experiences in a digital environment. Nuryani and Rafsanjani (2025) found that the use of Blooket's gamification in Economics learning can increase students' motivation and learning outcomes and create a more interesting and participatory learning atmosphere. In line with these findings, Hafiza et al. (2025) show that the application of the Blooket-assisted Teams Games Tournament (TGT) cooperative learning model contributes to student learning participation in Sociology learning. Furthermore, Hamid et al. (2026) identified the emergence of a pattern of collaborative competition in the classical application of Blooket, when learners spontaneously work together to complete quiz challenges. These findings suggest that the use of Blooket can be part of learning activities that involve participation, competition, and cooperation between learners. However, involvement in games does not always reflect a uniform social experience because the mechanism of competition and interaction between players conceptually also has the potential to elicit responses in the form of protests, tension, and minor conflicts. Therefore, the diversity of Blooket game modes needs to be considered to understand how learners perceive forms of associative and dissociative social interaction while participating in game-based learning activities.

Even though they are on the same learning platform, the Gold Quest and Cyber Hack modes on Blooket have different game mechanics, especially in the form of competition and resource retrieval between players. In Gold Quest mode, students answer questions to get the opportunity to choose treasure chests that contain random rewards, including adding gold and the opportunity to take other players' gold. Aulia and Jasiah (2025) explained that the Gold Quest mechanism integrates problem-answering activities with elements of luck, strategy, and competition between students. Meanwhile, the Cyber Hack mode has a hacking mechanism that in previous research was discussed under the name Crypto Hack. Sari and Jasiah (2024) explained that the mode allows players to collect resources through correct answers, then hack

to take other players' resources. In line with this, Adiningsih and Sulur (2024) describe that hacking mechanisms involve additional challenges that demand the player's speed, accuracy, and memory. These differences in characteristics conceptually have the potential to produce varied social interaction experiences, especially when learners gain or suffer losses due to the actions of other players. Such competitive situations can be related to the perception of dissociative interactions, such as the desire to protest, retaliate against the actions of friends, and feel tension, but also allow the emergence of associative interactions through the provision of support, assistance, and cooperation during the game. However, the existence of competitive mechanisms does not automatically indicate that learners are experiencing conflicts or building certain cooperation. Therefore, a comparison of the perception of social interaction in the two modes is relevant to understand how learners interpret the social experiences that arise during Blooket-based Sociology learning.

A number of previous studies have shown that the use of gamification and Blooket in learning is related to student collaboration, participation, and motivation. Sujarwo et al. (2023) found that gamification-based Sociology learning was able to improve the collaboration skills of grade XI students, while Hafiza et al. (2025) showed an increase in learning participation through the Blooket-assisted Teams Games Tournament (TGT) model. Nuryani and Rafsanjani (2025) highlighted the use of Blooket in improving motivation and learning outcomes, while Hamid et al. (2026) identified the emergence of collaborative competitions through spontaneous cooperation between students during games. Overall, the study showed the contribution of game-based learning to students' social engagement and relationships, but did not specifically explain the comparison of the perception of associative and dissociative social interactions based on differences in Blooket's game modes.

Based on previous research that has been examined, there is a gap in the study regarding the comparison of students' perceptions of associative and dissociative social interactions in the Gold Quest and Cyber Hack modes in the Blooket platform. Previous research focused more on collaboration, participation, motivation, and learning outcomes, while students' perceptions of cooperation, support, competition, desire to retaliate, and tension in two different game modes have not been the focus of the comparison. Therefore, the novelty of this study lies in the descriptive-comparative analysis of the two dimensions of social interaction perception using the same instrument in the group of grade XI students in Sociology learning. The difference in the mechanisms of Gold Quest and Cyber Hack is used as a basis to interpret the variation in student perception without assuming a cause-and-effect relationship.

Based on the research gaps that have been identified, the study of students' perceptions of social interaction in game-based learning is important to understand how the differences in game mechanics are related to the social experiences felt by students. This study was carried out on 32 students in class XI B of SMA Negeri 11 Makassar who participated in Sociology learning using the Blooket platform through Gold Quest and Cyber Hack modes. Both modes have different competition and

interaction mechanisms between players so as to provide relevant context to examine students' perceptions of the forms of social interaction that appear during the game. This study aims to describe and compare students' perceptions of associative and dissociative social interactions on the use of Gold Quest and Cyber Hack modes in Sociology learning in grade XI at SMA Negeri 11 Makassar. Comparisons were made based on questionnaire responses that measured students' perceptions of cooperation, mutual help, social support, competition, protest, and tension while participating in both game modes. Through a comparative quantitative approach, this research is expected to make an empirical contribution to the understanding of the variation in perceptions of social interaction in game-based learning, as well as enriching the study of sociology on associative and dissociative social processes in the digital learning environment. Practically, the results of the research are expected to be considered for educators in choosing and managing Blooket game modes by paying attention not only to student involvement, but also to the experience of social interaction that accompanies learning activities.

B. METHOD

This study used a quantitative approach with a descriptive-comparative method to describe and compare students' perceptions of associative and dissociative social interactions in the Gold Quest and Cyber Hack modes in the Blooket platform. Both game modes were followed by the same group of students, but the questionnaire responses between modes could not be paired at the individual level so comparisons were made descriptively at the group level. Data were collected through a five-level Likert scale questionnaire to measure students' perceptions of social interaction experiences in each mode. This study did not aim to test the cause-effect relationship, but rather to identify trends and variations in students' perceptions of social interaction in both game modes.

This research was carried out at SMA Negeri 11 Makassar by involving 32 students of grade XI B as research subjects. The determination of subjects used saturated sampling techniques at the grade level because all students of grade XI B were involved. All subjects participated in Sociology learning using Gold Quest and Cyber Hack modes on the Blooket platform, with each mode producing 32 responses to the social interaction perception questionnaire. The results of the study were focused on the perception of social interaction of grade XI B students so that it was not intended to be generalized to all students of SMA Negeri 11 Makassar.

The research instrument was a social interaction perception questionnaire using a five-level Likert scale, namely strongly disagree (1), disagree (2), neutral (3), agree (4), and strongly agree (5). The initial questionnaire consisted of 16 statement items that included associative (8 items) and dissociative (8 items) dimensions. The associative dimension measured perceptions of cooperation, help, support, and familiarity, while the dissociative dimension included protests, desire to retaliate, tension, and minor conflicts. Data was collected through Google Forms using the same instruments in Gold Quest and Cyber Hack modes, with 32 responses in each mode.

Examination of the instrument found that items 1 and 2 on the dissociative dimension had identical redactions, so item number 2 was excluded from the analysis without changing the original response. Thus, the analysis uses 15 statement items, consisting of 8 associative items and 7 dissociative items.

The research data were analyzed using descriptive statistics through the calculation of mean, standard deviation, minimum value, and maximum on the dimensions of associative (8 items) and dissociative (7 items) social interactions. The reliability of the instruments was checked using Cronbach's Alpha on each dimension and game mode. The comparison of Gold Quest and Cyber Hack scores was carried out descriptively at the group level because the individual responses of the two modes could not be matched. The results of the analysis were presented in the form of a table and interpreted based on the characteristics of the game as well as relevant social interaction theories without drawing cause-and-effect conclusions.

C. RESULTS AND DISCUSSION

1. Results of Descriptive Analysis of Students' Social Interaction Perceptions

Descriptive analysis was conducted on the results of a questionnaire of 32 students in class XI B of SMA Negeri 11 Makassar to describe the perception of associative and dissociative social interaction in Gold Quest and Cyber Hack modes. Data were analyzed based on average scores, standard deviation, minimum values, maximums, and reliability of instruments using Cronbach's Alpha. The results of the analysis are presented in Table 1.

Table 1. Descriptive Statistics of Students' Social Interaction Perceptions in Gold Quest and Cyber Hack Modes

Mode	Dimensions	Red	SD	Min.	Max.	Alpha
Gold Quest	Associations	3,32	0,76	1,50	5,00	0,885
Gold Quest	Dissociative	2,04	0,74	1,00	3,29	0,885
Cyber Hack	Associations	3,06	0,94	1,00	4,88	0,895
Cyber Hack	Dissociative	2,00	0,52	1,00	3,29	0,569

Source: Results of data processing of research questionnaire (2026).

Based on Table 1, the average perception of associative social interaction in Gold Quest was 3.32, higher than that of Cyber Hack of 3.06. In contrast, the average dissociative perception of the two modes was relatively close to each other, namely 2.04 in Gold Quest and 2.00 in Cyber Hack. The results of the reliability test showed that the associative dimensions in Gold Quest (α = 0.885) and Cyber Hack (α = 0.895),

as well as the dissociative dimension of Gold Quest (α = 0.885), had good internal consistency. However, the dissociative dimension of Cyber Hack showed relatively low reliability (α = 0.569), so the interpretation of the results needs to be done carefully. Descriptively, these findings show that the difference in perception is more pronounced in the associative dimension than in the dissociative.

2. Comparison of Perceptions of Associative Social Interaction in Gold Quest and Cyber Hack Modes

The analysis of associative social interaction was conducted based on eight indicators which included mutually helpful behavior, sharing strategies, providing support, discussing, cooperating, and building familiarity between students. The average comparison of each indicator in Gold Quest and Cyber Hack modes is presented in Table 2.

Table 2. Comparison of Average Indicators of Associative Social Interaction

Indicators of Associative Social Interaction	Gold Quest	Cyber Hack
Help a friend who is struggling	3,25	2,97
Sharing game strategies	3,16	2,63
Encourage friends	3,47	3,19
Provide mutual support	3,66	3,72
Calming an upset friend	3,41	3,22
Discuss game strategy	3,03	2,91
Feel the cooperation between students	2,97	2,47
Building familiarity between students	3,63	3,38
Overall average	3,32	3,06

Source: Results of data processing of research questionnaire (2026).

Based on Table 2, the Gold Quest mode obtained a higher average perception of associative social interaction than Cyber Hack in seven of the eight indicators. The largest differences were found in the indicator of sharing game strategy, which was 3.16 in Gold Quest and 2.63 in Cyber Hack, as well as cooperation between students, which were 2.97 and 2.47. In contrast, the indicator of mutual support showed slightly higher scores in Cyber Hack (3.72) than in Gold Quest (3.66). Overall, the average associative perception in Gold Quest was 3.32, while Cyber Hack was 3.06. These findings show that students report a higher tendency for associative interaction in Gold Quest, especially in strategy sharing and cooperation, although these differences are descriptive.

3. Comparison of Dissociative Social Interaction Perceptions in Gold Quest and Cyber Hack Modes

The analysis of dissociative social interactions was conducted based on seven indicators that included the tendency to protest, the desire to retaliate against the actions of other players, blame friends, emotional responses, tension, dislikes, and minor conflicts during the game. The average comparison of each indicator in the Gold Quest and Cyber Hack modes is presented in Table 3.

Table 3. Comparison of Average Dissociative Social Interaction Indicators

Dissociative Social Interaction Indicators	Gold Quest	Cyber Hack
Desire to protest the outcome of the game	2,09	2,38
Desire to retaliate for the actions of other players	2,06	2,47
Tendency to blame friends	1,72	1,75
Easily provoked emotions towards friends	2,16	1,50
Tensions due to competition	2,53	2,84
Showing dislike to a friend	1,72	1,38
Feel light conflicts between players	2,03	1,69
Overall average	**2,04**	**2,00**

Source: Results of data processing of research questionnaire (2026).

Based on Table 3, the average perception of dissociative social interaction in Gold Quest was 2.04, while Cyber Hack was 2.00, indicating a relatively small difference. However, there were variations in a number of indicators. Cyber Hack scored higher on indicators of desire to retaliate against other players (2.47), tension due to competition (2.84), and desire to protest the outcome of the game (2.38). In contrast, Gold Quest showed higher scores on indicators of emotional arousal towards friends (2.16), showing dislike (1.72), and feeling mild conflicts between players (2.03). These findings show that the two modes have different patterns of dissociative perception at the indicator level, although the overall average is almost the same. The difference is descriptive and has not shown a cause-and-effect relationship between the game's mechanics and students' social responses.

4. Discussion of Differences in Social Interaction Perception Based on Game Mode Characteristics

The results showed that students' perceptions of associative social interaction in Gold Quest mode obtained an average of 3.32, higher than Cyber Hack of 3.06. This

difference is mainly seen in indicators of sharing strategies and cooperation between students. In the perspective of social interaction theory, associative processes lead to the formation of social relationships through cooperation, accommodation, and actions that strengthen relationships between individuals (Oktavianti & Arifin, 2022). These findings can also be interpreted through the perspective of Vygotsky's social constructivism which places social interaction as an important part of the formation of learning experiences. Sujarwo et al. (2023) found that the use of gamification-based Sociology learning media was able to improve the collaboration skills of grade XI students compared to the comparison group. In line with that, Gymnastiar et al. (2025) show that game-based learning can encourage collaboration, empathy, and student engagement. The results of this study expand the discussion by showing that perceptions of associative experiences can vary between two game modes on the same platform, although the difference in scores has not proven that the Gold Quest mechanics directly increase cooperation.

In the dissociative dimension, the results showed a relatively close average perception between Gold Quest (2.04) and Cyber Hack (2.00), but there was a difference in the level of indicators. Cyber Hack scored higher on the desire to retaliate for the actions of other players (2.47) and tension due to competition (2.84), while Gold Quest showed higher scores on the tendency to be emotionally provoked (2.16) and light conflicts between players (2.03). Sociologically, dissociative processes include competition, contravention, and conflict that can arise in social relationships when individuals have different interests or responses (Oktavianti & Arifin, 2022). Assawal and Awaru (2023) also found that the use of digital technology is related to changes in students' social interaction patterns, including forms of competition and contravention. The findings of this study show that dissociative perceptions do not always appear in the same form in every game mode. The high perception of tension in Cyber Hack, for example, does not automatically indicate a high level of conflict between students because competition and conflict are different forms of social interaction.

These differences in perception patterns can be reviewed based on the characteristics of the game mechanics. Gold Quest integrates question-answering activities with chest selection and gold collection influenced by the element of luck, while Cyber Hack involves resource gathering as well as hacking activities against other players. According to Blooket's (t.t.) documentation, Gold Quest has a simple game complexity, while the hacking mechanics documented as Crypto Hack emphasize memory and speed aspects. These differences have the potential to present a different competitive experience, especially when students gain or lose resources due to the actions of other players. Hamid et al. (2026) found that the use of Blooket in learning can give rise to collaborative competition, which is a situation when competition takes place simultaneously with cooperation between learners. The findings provide a foundation that the competitive element in the game does not always conflict with the formation of associative interactions. Thus, the difference between the Gold Quest and Cyber Hack mechanics can be used as an interpretive

framework for variations in student perceptions, but it cannot be ascertained as the direct cause of cooperation, desire to retaliate, and tension.

Overall, the results show that the use of Gold Quest and Cyber Hack on the Blooket platform is related to the variation in perceptions of associative and dissociative social interactions in Sociology learning. These findings imply that educators need to consider the characteristics of the game mechanism, not just student interest and participation, when choosing a game-based evaluation mode. However, the interpretation of the results needs to take into account several limitations, especially the relatively low reliability of the dissociative dimension of Cyber Hack (Cronbach's Alpha = 0.569), the use of perception questionnaires without direct observation, and the unavailability of matching individual responses between modes. In addition, the study has not directly measured the frequency of resource-taking actions and the accompanying social responses. Therefore, further research is recommended to integrate the questionnaire with social interaction observations, conduct a more in-depth examination of the quality of the instruments, and use paired respondent data to gain a stronger understanding of the relationship between the game mechanism and the students' social experience.

D. CONCLUSION

The results showed that there was a difference in students' perceptions of associative and dissociative social interaction between Gold Quest and Cyber Hack modes on the Blooket platform. The perception of associative social interaction in Gold Quest obtained a higher average (3.32) compared to Cyber Hack (3.06), especially in the indicators of strategy sharing and cooperation between students. Meanwhile, the perception of dissociative social interaction showed relatively close averages, namely 2.04 in Gold Quest and 2.00 in Cyber Hack. However, Cyber Hack showed a higher tendency in the indicators of desire to retaliate against the actions of other players and tension due to competition, while Gold Quest was higher in the indicators of emotional response and mild conflict. These findings show that the two modes have different characteristics of social interaction perception, but these differences are descriptive and do not show a cause-and-effect relationship.

Based on these findings, Sociology teachers are advised to consider the characteristics of Blooket's game mechanism in choosing learning modes and provide directions to encourage cooperation and manage competition positively. The next research is suggested to combine questionnaires with direct observation, use anonymous matching respondent data, and improve the quality of instruments, especially in the dissociative dimension of Cyber Hack which shows relatively low reliability. This approach is expected to result in a deeper understanding of students' perceptions and dynamics of social interaction in digital game-based learning.

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