



APPLICATION OF FISBALL GAME MEDIA BASED ON WILLIAM D' BROOKS TO IMPROVE SELF- CONCEPT OF VOCATIONAL HIGH SCHOOL LEARNERS

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Abstrak

Tujuan ini untuk memberikan penerapan media ini dengan teori konsep diri dari William D. Brooks agar bisa meningkatkan pada peserta didik di Sekolah Menengah Kejuruan. Metode yang digunakan dengan cara Penelitian ini mengadopsi pendekatan R&D untuk meneliti dan meningkatkan kegunaan media bimbingan dan konseling menggunakan media permainan guna meningkatkan *self-concept* siswa yang rendah. Adapun proses prosedur penelitian ini diantaranya: (1) Riset awal dan pengumpulan informasi, (2) perencanaan dan pengembangan produk, (3) uji coba lapangan pertama, (4) validasi ahli materi dan media, (5) revisi produk, (6) uji coba praktisi, (7) uji coba lapangan, (8) Revisi II dan produk akhir. Temuan hasil penelitian menunjukkan bahwasanya peserta didik telah melaksanakan serangkaian kegiatan tentunya berpendapat bahwasanya mereka menjadi lebih tahu mengenai *self concept* pada dirinya. Pada hal ini, peserta didik cenderung sudah memiliki gambaran strategi mengenai penghadapan yang sesuai dengan konsep diri masing-masing. Mereka mengungkapkan bahwa merasa senang dengan adanya media Fisball D'Brooks, karena tidak monoton sehingga materi yang dipelajari mudah diserap dan diterapkan. Peserta didik merasa bahwasanya kegiatan atau materi Bimbingan dan Konseling ternyata bisa dirancang dengan menarik dan tidak membosankan sehingga mereka lebih mudah dalam memahami dan senang menanti kegiatan berikutnya.

Kata Kunci: Media Fisball; Permainan; Konsep Diri.

Abstract

Many vocational high school students struggle to understand their self-concept, which affects their ability to adapt academically and socially. Purpose of this study aimed to develop and validate Fisball D'Brooks, a game-based guidance and counseling media grounded in William D. Brooks' self-concept theory to support students with low self-concept. Methods of this study employed a Research and Development (R&D) design using the Borg & Gall model. The development involved expert validation (media and material experts), practitioner review, and field trials. Data were collected using feasibility checklists and student feedback. Results show The product achieved high feasibility scores from experts (usability = 93.75%, feasibility = 87.5%, accuracy = 95%, overall validity index = 92%, categorized as very valid).

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Students reported increased awareness of their strengths and weaknesses and showed higher engagement in guidance sessions. Conclusion of this study Fisball D'Brooks is a practical and valid media that supports guidance learning and helps students improve their understanding of self-concept.

Keywords: Fisball Media; Games; Self-Concept.

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INTRODUCTION

Education is a list that every individual must go through. In this case, in a level of education, especially in Vocational High School (SMK) students who experience many transitions in a process during the school period. There is an environmental transition, of course, students must understand all the changes that follow (Zhylin et al., 2022). As for the existence of a developmental transition starting from the social environment (Sofyan et al., 2025), peer individuals (Caruana et al., 2019; Nika, 2025), and even the learning system which must be prepared with the right self (Wang et al., 2019; He & Ma, 2025). According to Santroks (in Saputro & Sugiarti, 2021) school transition is the movement of students from the old school to a new school that is higher in level, starting from elementary school to junior high school, high school, to college.

Vocational High School (SMK) is one of the levels of education, where the subject of education is adolescents who prepare themselves for the OJT stage, namely On the Job Training (Maryanti, 2019). Adolescents have an appreciation of who they are and what distinguishes them from others. Adults' perceptions of adolescents arise from a combination of personal experiences and images provided by the media, regardless of other images provided about adolescent development (Qalsum & Yani, n.d.). The view that differentiates between themselves and others in this case is a self-concept. Self-concept as a unique trait in individuals, so it can be used to distinguish individuals from other individuals (Purwandika & Ayriza, 2020; Choy & Yeung, 2022; Röhlke et al., 2025).

According to William D. Brooks (in Pokhrel, 2024) defines that self-concept as a perspective related to the totality of psychological, physical, and social towards oneself that comes from various experiences as well as one's interactions and communication with others. There is also a self-concept as an individual's inner picture which includes knowledge of himself, self-esteem and judgement of himself (Hendri, 2019) (Allathifiyah et al., 2023). Regarding this too, it is defined by Carl Rogers (in Miftakhul, 2017) that in self-concept there are concepts, namely ideal self and real self, ideal self is a condition where a person wants to see himself as he wants, while real self is a person's condition in reality today.

The existence of a condition where vocational students who must be more concrete in understanding about self-concept is certainly a condition that makes it possible to understand less about themselves. This is reinforced by data obtained by researchers from the categorisation of scores on the self-concept scale, which found that of the 70 students who completed the questionnaire, 45.7% or 32 students showed a low level of self-concept and 28.6% or 20 students

were at a moderate or high level. This means that approximately 74.3% of students experienced low self-concept and required intervention or counselling.

Experiencing a point where if the self-concept is not well understood, there will be confusion about himself. As a counseling teacher, of course, you have to think of a strategy so that students can understand about their self-concept which will relate to how individual students behave towards their environment. Applying a method which is not monotonous needs to be emphasised so that learning such as about self-concept can be absorbed properly (Cai & Yu, 2023; Muhtar et al., 2025). The condition of adolescence is at an easy point of experiencing a bored condition, a game method with a learning context needs to be improved. At this time, moods can change very quickly which is easy to get bored of something that does not attract their attention (Supini et al., 2024).

As a Guidance and Counselling teacher, of course, has a responsibility in guiding students to lead to a constructive self-concept while still being accompanied by a medium that attracts students' attention in learning what is intended (Cordaro et al., 2024; Isaksen & Gudmundsdottir, 2025). The existence of this can be through game media where a vocational high school student, in other words, a teenager who is easily bored so that he needs a distraction so that the material provided can be conveyed comprehensively (Rizal & Maryam, 2023).

However, existing guidance practices in vocational schools still rely heavily on lecture-based methods, which tend to be monotonous and fail to engage students. Although previous studies explored the use of instructional media in education (Butcher, L., & Ferguson, G. (2021). Nugroho, W., , M., & Arianto, F. (2023), Kuo, Wang, & Lui, 2025, there is limited empirical evidence on game-based media specifically designed to develop students' self-concept grounded in William D. Brooks' theory. No studies were found that integrate game mechanics—challenge, reward, and reflection—to guide students in self-concept exploration. A game media that is taken, of course, must have another useful side, one of which is a fishing rod media by carrying out the theory of William D. Brooks.

A game media whose contents are learning about the self-concept of students and are packaged in a more concise and interesting form. Generally, a fishing rod as a function of early childhood play, but in this case it has a function as a media carrying learning in equipping students' self-concept. The existence of this media is D'Brooks' Fiss Ball, which is an acronym for taking a self-concept theory from William D'Brooks. Taking this media is also based on various factors, some of the results of the benefits of training a focus on fishing a ball in a pool containing a ball about self-concept.

The number of students who do not understand themselves makes it difficult to adapt, and even determine their direction after stepping on the steps of the ladder they are currently on. As in the theory of William David Brooks, that the self-concept is divided into a negative self-concept and positive self-concept. The existence of a Fissball D'Brooks media will open their mindset to reduce negative self-concept patterns and uphold positive self-concept patterns. This understanding can certainly be effectively conveyed if the psychological state feels comfortable and will cause a harmony of absorption of material, which in this case can be through the Fissball D'Brooks media.

METHODS

This study adopts an R&D approach to research and improve the usability of guidance and counselling media using game media to improve students' low self-concept. Sugiyono (in

Nurfadhillah et al., 2021) states ‘the Research and Development (R&D) approach is a research model used to produce products to improve the usefulness of media by modifying a particular media’ (Rahma et al., 2024). The process of developing the media effectively requires a process of testing the needs analysis and testing the effectiveness of the media using several tests. The goal is to ensure that the resulting media is truly feasible and can actually be used optimally, so in-depth media research and testing is needed. So this Research and Development (R&D) research method is carried out in stages and takes a long period of time.

The research entitled ‘Utilisation of Fisball D’ Brooks Media to Increase Self-Concept of Vocational High School Learners’ researchers used the Borg and Gall development model which has been developed. The process is made in the form of a chart as follows:

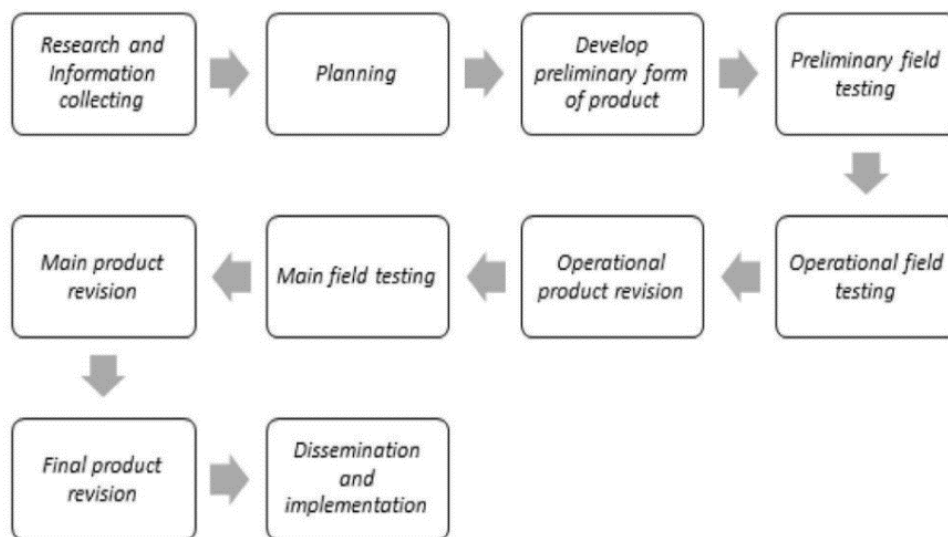


Figure 1. Bord and Gall Research Roadmap (Source Gall et al., 1996;Yoga et al., 2020)

The process of this research procedure includes: (1) Initial research and information gathering, (2) product planning and development, (3) first field trial, (4) material and media expert validation, (5) product revision, (6) practitioner trial, (7) field trial, (8) Revision II and final product. The implementation of the media development procedure was carried out through testing with media experts and the development of learning materials and guidance processes, including Dr Ely Roy Madoni, M.Pd., Kons. as a media expert, while the material experts were Siti Arifah, M.Psi. and Mrs Salma Nur Maulida. The assessment indicators were carefully evaluated and tested with a small group from vocational secondary schools in the Jombang district.

RESULTS AND DISCUSSION

Results

1. Media Product Specifications

Fisball D'Brooks game media is an acronym for William D. Brooks who adopted from an early childhood game, namely a fishing rod. Unlike the concept of fishing games that are played in general, in this case there is a modification of the overall concept and design. In this game media, there is a pool that will contain a ball with a note in see figure 2. There is also in this Fisball D'Brooks game media which will have a jackpot and zonk ball, regarding the jackpot ball, you will get a reward when you can answer or carry out the instructions listed on the ball notes and

regarding the zonk ball, students will have orders to carry out a simulation or even activities to respond to the phenomena that we have written on the paper on the ball. The Fisball D'Brooks game media was developed as follows:



Figure 2. Results of the Application of the D'Brooks Fisball Game Media

In accordance with the theory of self concept by William D. Brooks, that in something individuals must understand about their self-concept, what are their weaknesses and strengths so that they are ready to accept whatever reality is obtained by not being down on a result. The existence of this, such as D'Brooks' Fisball media where students will perform the act of fishing a ball where there is a magnet to be able to stick to the fishing media, but there is also an obstacle which we designed from a styrofoam grain and a challenge from the contents of the paper in the ball when it gets zonk, must be ready to continue the existing instructions. As for this, it can also train about emotional, self-confidence in successfully getting the ball with pacing media, as well as focus on achieving the goal of the ball to be fished and self-ideality which is a sense of happiness towards himself for the success of getting the appropriate ball. The design and key indicators of the basic concepts of William D. Brooks' self-concept theory are as follows and can be viewed in Figure 3:



Figure 3. Indicators of William D'Brooks' Self-Concept Theory

2. Product Feasibility Test

Based on what was carried out, the development of the D'Brooks Fisball game media was carried out with a series of product feasibility tests which were tested with parties who were experts in the aspects of media, material, and users of guidance and counselling service practitioners (counseling teachers / counsellors). The experts in the aspects of media and material were carried out with the campus, namely on behalf of Dr. Bakhrudin All Habsy, M.Pd. and Mr. Wisnu Kurniawan, M.Pd. while in the aspect of practitioners carried out on teachers of SMK Negeri 1 Jombang. And the results of product testing are as follows:

Table 1 Product Specification Feasibility Test Results

Aspects	Maximum score	Score	Percentage (%)
Usability Test	16	15	93,75%
Feasibility Test	24	21	87,5%
Accuracy Test	20	19	95%
Total Score		55	
Average		3,6	
Percentage (%)		92%	
Category		Highly Valid	

The results found in the table where the acquisition of the results of testing product specifications get a very feasible category which can be seen from the results of the usability test, feasibility test and accuracy test results from several aspects taken from the testers.

3. Activity Implementation

Based on the implementation of the Fisball D'Brooks media application activities, carried out for two days in a one-week interval and see figure 4. The implementation of the application of Fisball D'Brooks is carried out by adjusting the time of Guidance and Counselling subjects at SMK Negeri 1 Jombang. In this case, the first day was carried out by explaining the purpose of implementing activities to students, which was then followed by opening learning activities. The first day's activities by conducting an outline of self concept material, and referring to William David Brooks' theory. Regarding this too, on the first day's activities after the presentation of the material then refer to the presentation of activities on the second day, namely the practice of D'Brooks' Fisball media.

The existence of practical activities on the second day, with the second week also explained about Fisball D'Brooks media and associated with students and material that students have learned in the previous week. The next activity is the division of groups where the technique is to count the continuity on a count of one to five, or even six by adjusting the number of students. Furthermore, there is a technical explanation of the game to students to make it easier for them to carry out activities. After this, each group did a hompimpa or suit which was used to determine the leader as a player who fished the ball representing his group.

In this case, after determining a leader, of course, it is continued by rotation until the group runs out. The leader in the game then fishes for the ball which can be assisted by group members using strategies from each group, either with the help of stationery or even other strategies. Regarding this, the leader has managed to get the ball which then opens the ball followed by reading the instruction paper inside. The leader leads the discussion to carry out the instructions or solve the problems on the paper. In this case, after the discussion within a predetermined period of time and written on paper, then the leader or all group members carry out and convey the results of the discussion which will then have further explanation from the accompanying teacher or even responses from other groups.



Figure 4. Activity Implementation of the D'Brooks Fisball Media game

Learners who have carried out a series of activities certainly think that they know more about their self-concept. In this case, learners tend to already have an overview of strategies regarding dealing in accordance with their respective self-concepts. They revealed that they were happy with the existence of Fisball D'Brooks media, because at first they only did ordinary learning by maximally using a projector, but this time they could do it through game media. Learners feel that Guidance and Counselling activities or materials can be designed interestingly and not boring so that they are easier to understand and happy to wait for the next activity.

Discussion

The purpose of this study was to develop and evaluate the feasibility of *Fisball D'Brooks*, a game-based counseling media grounded in William D. Brooks' self-concept theory. The findings show that the media achieved a high feasibility score from experts and practitioners, and students reported increased engagement and self-awareness after participating in the activity. These results demonstrate that a game-based approach can facilitate meaningful self-exploration for vocational students.

First, the findings support Brooks' view that self-concept develops through personal experiences and social interactions. When students drew a ball, read the prompt, and responded through reflection or action, they engaged in direct emotional and cognitive processing. This aligns with (Breil et al., 2022; Zhang et al., 2024). Who emphasize that self-concept develops through reflection and interaction with the environment, and with (Yazdani & Ross, 2019) who states that real experiences shape the distinction between *real-self* and *ideal-self*. The data from this study reinforce that experiential activities help students recognize personal strengths and weaknesses, consistent with Brooks' claim that individuals with a strong self-concept demonstrate more constructive behavior.

Second, this study extends evidence from previous research showing that game-based learning enhances students' engagement and emotional involvement. Fernando (2020) found that educational games increase creativity and emotional regulation, while (Duncan, 2020; Moon & Ke, 2020; Salari et al., 2021) reported that gamification improves motivation and engagement due to emotional stimulation and reward mechanisms. The current findings align with (Zourmpakis et al., 2023) who concluded that game elements can increase willingness to participate and strengthen attention retention. Likewise, vocational students in this study expressed high enthusiasm and motivation, indicating that embedding guidance content into gameplay reduces monotony and increases content absorption.

Third, this study highlights the mechanism by which game-based media influence the development of self-concept. *Fisball D'Brooks* requires decision-making, problem-solving, and

self-reflection, making students active participants. (Gunderman, 2024; Ter Minassian, 2018) explains that games create a *safe emotional space* that allows learners to try, fail, and try again without fear of judgment. This aligns with (Macías, 2025; Orłowski et al., 2022) who found that positive emotional experiences improve confidence and deepen self-awareness. Further strengthens this finding, stating that learning through action and interaction reinforces cognitive and emotional growth (Kugbey et al., 2018; Liu, 2025; Park et al., 2019). In this study, students who successfully completed a challenge gained emotional reinforcement and confidence, while those who received a “challenge ball” learned persistence and adaptability.

From a practical standpoint, *Fisball D'Brooks* provides a solution for school counselors who struggle with students' low participation in counseling activities due to perceptions that counseling is monotonous. By turning counseling into an interactive experience, students felt more comfortable and willing to express personal thoughts and emotions. For vocational schools, this media supports preparation for *On The Job Training (OJT)*, particularly in developing adaptability, communication skills, and confidence.

Despite promising results, the study has limitations. The trial involved a limited number of participants from a single school and did not include a control group. Future research should adopt quasi-experimental or experimental designs and involve a larger sample to measure effectiveness more comprehensively. Additionally, standardized psychological instruments are recommended to quantitatively assess changes in self-concept. Overall, the present study provides empirical evidence that *Fisball D'Brooks* is feasible, engaging, and pedagogically beneficial. Combining theory-based content and experiential game-based activities effectively supports students in exploring and developing self-concept.

SUMMARY

Conclusion

Fisball D'Brooks media is an effective media used to help students understand about their self-concept. In this case, the existence of *Fisball D'Brooks* media makes students' interest in learning about material in Guidance and Counseling subjects, and can be especially useful for vocational students because they prepare themselves for pre-employment or On the Job Training activities so that they are able to adapt and create an environment that is favorable and harmonious towards themselves.

A Guidance and Counseling lesson will be effective if a counseling teacher is able to apply an interesting and not monotonous method to students. The existence of this, will make students interested and be able to increase the existence of BK, and help the process of student development, especially at the SMK level.

Recommendations

The suggestions for this research study for several parties include:

1. For students, it is crucial to develop self-concept by learning more about themselves in order to prepare for the series of stages they will go through.
2. In this regard, it is recommended that counselling teachers and education units better understand students' needs to support the learning process so that it is not monotonous and more creative in determining learning methods for students.
3. For further research, it is hoped that innovations related to the development of self-concept, particularly the process of learning guidance intervention in schools, will be provided.

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