



## Implementation of Brunner's Cognitive Learning Psychology Theory in Catholic Religious Learning

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**Abstract.** *This research is motivated by the learning process of Catholic religious education in the classroom experienced as only for the sake of cognitive formation that is done simply. Cognitive formation is not an easy thing to do, but requires a strategy for the achievement of maximum learning outcomes. In reality, in the learning process, students follow more, so that their cognition is getting weaker. In this case, Jerome S. Brunner suggests that, cognitive theory becomes very important in achieving educational goals, including in Catholic religious education. Meanwhile, the purpose of this research is that students can achieve good mental or cognitive quality, not just intelligence alone. The method used in this research is the literature review method. The results of this study are first, cognitive learning theory is a theory in which it states that the learning process takes precedence over the learning outcomes. Second, the active participation of individuals in the cognitive process is the basis for achieving the learning objectives of Catholic religion. Third, Catholic religious teachers as facilitators who motivate and evaluate students in the learning process of Catholic religious education. Fourth, Catholic religious teachers can use Bruner's cognitive theory for the application of Catholic religious education learning in the classroom.*

**Keywords:** *Brunner's Cognitive Learning Theory, Implementation, Catholic Religious Learning.*

### 1. INTRODUCTION

Basically, humans as social beings have the right to education. Education is a planned effort and a conscious effort to achieve a learning condition in the educational process, so that students can be active to channel and develop their abilities, in obtaining a smart, good personality, noble character, able to blend in with the environment and society, and able to have a good religious spirituality (Pristiwanti et al., 2022).

In the scope of education, cognitive is defined as one of the systems in learning that recognises that learning is the basis for various cognitive indicators and as an answer to achieving understanding. A person's behaviour in this cognitive theory is determined by his understanding and response to the conditions of the goal to be achieved. Deep thought processes and also how to learn, determine changes in a person's behaviour in achieving the goals achieved (Wandani et al., 2023).

Based on the situation or conditions that occur, it is found that there are many students who are not optimal in learning. The lack of maximum learning outcomes is influenced by various factors so that students' learning outcomes are unstable. As for the factors or problems that affect the lack of quality in learning students. The first is internal factors that come from within students, both psychology and health. Psychological factors consist of intelligence problems, requests, encouragement or motivation, fatigue and

attention, while physical problems refer to body defects. The second, is external factors or problems that exist outside of learners, which are influenced by family, environment, school, and society, which concerns socio-economic issues, and how parents and teachers educate students (Wiradintana, 2018).

Many people who research in the field of brain development say that the development of brain function is closely related to cognitive development. Jerome S. Bruner in this case became one of the figures who developed and formulated the theory of cognitive development. Bruner sees that cognitive psychology is one of the foundations that encourage teachers to pay attention to the importance of the development of ways of thinking, with efforts to prioritise the active involvement of individuals and find different abilities in searching and making new discoveries (Hatip & Setiawan, 2021).

## **2. LITERATURE REVIEW**

The first research conducted by Lestari et al, in Mathematics, which says that applying Brunner's theory can improve students' learning abilities, because the learning process using concrete objects makes students easily interested in learning materials. In addition, the use of concrete media will also greatly assist students in improving their learning abilities (Lestari et al., 2023). The main emphasis lies on teaching learners with concrete things so that learners easily understand the teaching material taught to them. For learners at a low age, it should be taught using things that are concrete and can be observed with the five senses (Ndoa et al., 2024).

Research with the same focus on Brunner's learning theory was conducted by Kurniawan at SMPN 9 Yogyakarta, and focused on Islamic religious education with constructivism learning theory. The purpose of the research is to find out how the implementation of Brunner's learning theory in Islamic religious education, the supporting and inhibiting factors of implementation, and efforts to overcome the problem. While the results of the study are that first, the implementation of Islamic religious education materials using Bruner's constructivistic learning theory makes learning fun and has been implemented according to the stages and principles at SMPN 9 Yogyakarta; second, the implementation of Brunner's learning theory has gone well with supporting factors and inhibiting factors; third, efforts to overcome problems in the implementation of Brunner's learning theory through instilling character values in students such as self-confidence and tolerance, improving the quality of teachers through participation in training, workshops, and so on, and increasing learning motivation in students (Kurniawan, 2021). Kurniawan's

research results are very good for putting Brunner's learning theory into practice. However, this research emphasises the constructivistic aspect rather than the cognitive. Whether the cognitive aspect is very important, but Catholic religion teachers should not forget the aspect of character education at school and in the classroom to all learners.

The third study analysed here is Wiradintana's, which focuses on the application of Brunner's theory in refining the behavioural approach. It is emphasised in the research that in every teaching and learning activity, learning outcomes are always used as a benchmark, if the learning outcomes are not in line with expectations then it is said that the teaching and learning activities are not adequate. Seeing this condition, it is appropriate to make efforts so that the learning outcomes obtained are satisfactory. The development of learning theory has undergone many changes in its journey, one of the theories that has developed at this time is behaviouristic theory which clearly emphasizes that the behaviour that emerges from students is the result of learning. However, in practice, the behaviour that emerges from learning results will not automatically be formed and seen without a good learning process. On this basis, it turns out that the development of process-oriented learning is very important as done by Bruner. By looking at the implementation that has been done, Brunner's learning theory can improve learning outcomes that will have an impact on the behaviour of students (Wiradintana, 2018). Every learning theory must be considered a measuring tool to measure the level of achievement. The use of theory must have a clear purpose, and therefore every teacher must master many theories to be practised in classroom learning. Teachers can use which theories and methods and models are most suitable to be implemented in learning.

Departing from students' low ability to learn and corroborated by some evidence of previous research conducted, Khasanah et al. conducted research on how to improve students' understanding of stamps by applying Jerome Brunner's learning theory. The low ability to understand the material delivered by the teacher to students is caused by the learning methods used, where teachers more often use lecture or conventional methods or provide direct learning in the classroom. This method is seen as very boring and does not have a significant effect on the level of student understanding in capturing the content of the material presented to students. So, teachers must understand, know and be able to apply various learning methods that are in accordance with the situation and conditions of the students (Agustina et al., 2020; Khasanah & Purwaningrum, 2023). For now, it is no longer the time to apply monotonous learning methods in improving student understanding related to the material being taught. To improve cognitively good understanding, teachers must know, understand and implement a variety of different methods in the classroom. Of course,

there are many learning methods that can support the improvement of students' understanding or cognitive in the learning process.

### **3. METHODS**

This research is a type of research that is a literature study. to obtain various information related to this research, the researcher seeks, collects various literature that is in accordance with the research topic, namely the implementation of Jerome Brunner's Cognitive learning theory in Catholic Religious Education Learning. Indeed, there is still very little literature that talks about Catholic religious education. There is a lot of literature on the implementation of cognitive learning theory, but in the fields / sciences of mathematics, language, but not much has been found on its implementation in Catholic religious learning. Thus, researchers will utilise the implementation of cognitive learning theory in other sciences that can be found in various literatures, then adapt it to the learning process of Catholic Religious Education in schools/classes.

### **4. RESULTS**

Jerome Seymour Bruner (1 October 1915 - 5 June 2016) was an American psychologist who made significant contributions to human cognitive psychology and cognitive learning theory in educational psychology. Bruner was a senior research fellow at New York University School of Law. He received his BA in 1937 from Duke University and his PhD from Harvard University in 1941. He taught and conducted research at Harvard University, Oxford University, and New York University. The General Psychology Review survey, published in 2002, ranked Bruner as the 28th most cited psychologist of the 20th century.

To understand Bruner's thoughts in the field of educational psychology, here will be presented some of his core thoughts that influence the world of education today. The first idea is discovery learning. In discovery learning, Bruner emphasises the importance of active learning. Active learning gives learners the opportunity to find their own information or knowledge rather than having to wait for knowledge to be delivered to them by the teacher. Receiving learning or knowledge materials will only make learners passive and inactive in surfing the world of knowledge. In this concept, Bruner believes that knowledge will be more meaningful and easily remembered by learners if they are involved and participate in the process of exploration and discovery of knowledge from various available sources (Mussabeh, 2020).

The second point of thought is cognitive representation theory. Bruner proposes that each individual can understand the world through 3 (three) modes of representation, namely: enactive, iconic and symbolic. Enactive is representation through direct action such as manipulating objects. Iconic is representation through images or visualisation, and symbolic is representation through language and abstract symbols. These modals evolve with age, but they remain relevant in the learning process (Presno, 1997).

The third point is scaffolding. Bruner socialised the concept of scaffolding to describe the support provided by teachers or parents to children when learning. This support should be given gradually and adapted to the needs of students until they are able to complete the task independently and without being assisted by any party (Zaw, 2005).

The fourth point is the spiral curriculum. According to Bruner, learning materials should be presented in stages or stages and repeated with increasing levels of complexity over time. This allows learners to deepen their understanding of materials or concepts as they develop cognitively (Hauenstein, 2024; Metsämuuronen & Räsänen, 2018; Shinohara, n.d.).

The fifth point is constructivism. Bruner strongly believes that learning is an active process where students construct new knowledge based on their experiences and prior knowledge. That means that social and cultural context is needed in shaping one's way of thinking (Metsämuuronen & Räsänen, 2018).

The sixth point of thought is intrinsic motivation or motivation that arises from within oneself. Every student should strive to be intrinsically motivated. Bruner highlighted that learning motivation that comes from within or intrinsically will be more effective than motivation that comes from outside (extrinsic) such as the environment, advice from others and so on (Bruner, 2018; Mao et al., 2024; Walker, 2014).

Bruner emphasises that effective learning occurs when students are actively engaged, use a variety of cognitive representations, and receive appropriate support. His theory forms the basis for modern learning approaches, particularly in exploration-based teaching and constructivistic approaches.

## **5. DISCUSSION**

Jerome Bruner was an educational psychologist who was very influential in the development of theories of learning and education. Jerome Bruner's theory in the field of educational psychology is known as the 'Psychology of Constructivism'. In the context of education, this theory emphasises that learning is an active process in which individuals

construct their own knowledge through experience, reflection and interaction with their environment (Hymans, 2010). Bruner's theory has been influential in curriculum development, learning design, and educational practice. His constructivist approach emphasises the active role of students in learning, where they construct their own knowledge through experience and reflection. The theory also considers the importance of individual cognitive development in designing effective learning strategies. With a focus on constructivism, interaction, experience, and cognitive development, Jerome Bruner's theory provides a rich and relevant view in understanding how individuals, especially children, construct their knowledge, which is an important aspect in educational psychology (Castelló & Botella, 2006; Raskin, 2001).

In the context of implementation in Catholic Religious Education (PAK) Learning, based on the theoretical study and the results described above, several points of thought can be described to be developed in the practice of PAK learning to students.

#### **A. Development of an active PAK Learning Model**

Bruner emphasises the importance of active learning, where students should be actively involved in their learning. This involves exploration, observation, questioning and problem solving. In the context of educational psychology, Catholic Religious Teachers should endeavour to give learners the possibility to actively participate in their learning process according to their stage of cognitive development. Learners should be encouraged to actively seek or explore their own religious knowledge materials, both from the official teachings of the Church and from other reliable sources (Faiz et al., 2022).

#### **B. Discovery-based Catholic Religious Education Curriculum:**

Bruner encouraged the use of a discovery-based curriculum where students are encouraged to discover important concepts on their own through exploration and problem solving. In children's education, Catholic religious teachers can design situations that allow their students to discover concepts of Catholic religious knowledge, as well as other sciences in a more effective and efficient way. Catholic Religious Teachers should be good facilitators in guiding their learners to solve the problems they discover appropriately (Susana, 2019; Winarti & Suyadi, 2020).

#### **C. Spiral Curriculum in Catholic Religious Education**

The concept of spiral curriculum, proposed by Bruner, helps Catholic religious teachers to organise the Catholic religious education curriculum in a spiral manner. The spiral concept helps teachers to present learning in a repetitive sequence with increasing

levels of complexity in line with students' cognitive development. If the level of complexity of students' understanding is still low, the material presented is also in a simple context, on the other hand, if the complexity of students' understanding is high, then the material presented must also be adjusted to that level. In the context of educational psychology, Catholic religious teachers must understand the stages of children's development and design curriculum that suits their cognitive abilities at each stage (Metsämuuronen & Räsänen, 2018).

#### **D. The Concept of Scaffolding and Catholic Religious Education**

The concept of 'scaffolding' refers to the support provided by teachers to learners as they learn. In developmental psychology, it refers to the use of guidance that is appropriate to the student's level of cognitive development. Teachers can provide assistance to learners as needed, but gradually reduce it as students' abilities develop (Zaw, 2005).

#### **E. Utilisation of Story Style in Catholic Religious Education**

Bruner also pointed out the importance of utilising the practice of storytelling or narration in learning. Teachers can use a variety of stories, but it must be understood that stories are used as a tool to facilitate understanding and teaching of important concepts. It can be used in various educational contexts, especially for learners (Daud, 2020).

### **6. CONCLUSION**

It is not easy to apply teaching strategies to students based on Bruner's psychological theory of learning. But by paying attention to some of the stages and points of thought offered, the learning atmosphere in the classroom will be better and students' motivation to learn will increase. Thus, the increase in learning motivation will certainly affect learning achievement as well.

What must be considered in implementing Bruner's cognitive learning theory is that educators or teachers must really pay attention to the level of development of students' understanding, create a pleasant learning atmosphere by allowing students to actively seek and discover new knowledge, provide opportunities for students to solve problems found, and educators or teachers must continue to supervise and become facilitators in the entire education and learning process.

## 7. LIMITATION

Although the desk research has been completed and published, we realise that there are still many shortcomings and weaknesses, especially related to the very limited literature review and also the few sources of reference. At the very least, in the context of Catholic religious education for Catholic learners, this research can help encourage teachers to reform themselves to change their teaching methods in accordance with the demands of today's generation.

We remain open to criticism and suggestions for the improvement of this research in the future.

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