Pop-up book of bajakah plant (*Spatholobus littoralis*) inventory results as learning media on biodiversity concept: A feasibility analysis

Alevin Wahyudi, Anisyah Yuniarti*, Syamswisna

Biology Education Study Program, Faculty of Teacher Training and Education, Tanjungpura University, Pontianak, West Kalimantan

*Corresponding author: anisyah.yuniarti@fkip.untan.ac.id

OPEN ACCESS

ABSTRACT

This research aims to analyze the feasibility of a pop-up book regarding the results of an inventory of bajakah plants as a learning medium on biodiversity concepts. This research is descriptive. The research instrument used was the pop-up book media validation sheet, consisting of three aspects: consistency, format, and attractiveness. The pop-up book media was validated by five validators consisting of two Biology Education lecturers and three Biology teachers for 10th grade of senior high school. Data analysis was performed using Content Validity Ratio (CVR) analysis and Content Validity Index (CVI) analysis. The pop-up book media validation analysis results obtained a CVR of 0,99 and a CVI of 0,99. The value obtained is classified as valid so that the pop-up book can be declared feasible as a learning medium. This pop-up book can be used in learning biodiversity concepts for 10th grade of senior high school.

INTRODUCTION

Learning media is a component that supports the learning system. The absence of learning media can affect learning processes and gains (Puspitarini & Hanif, 2019; Saadah et al., 2022; Sahronih et al., 2020). This view has been challenged by various studies that found a positive relationship with academic achievement (Ogundokun & Adeyemo, 2010). Based on the results of interviews conducted with biology teachers of Sompak 1 Senior High School at October 26, 2019, it is known that there are several obstacles experienced by teachers in carrying out learning on biodiversity material. The obstacle in question is that the book as a learning resource has not been equipped with information and images that can clarify biodiversity material. There is no learning media that is used to help students gain knowledge and there is no utilization of the potential of local plants around the school which is used as a learning resource on biodiversity material. So, it is necessary to make efforts to help teachers in solving this problem. The effort made is to make pop-up book media about the results of bajakah plant (*Spatholobus littoralis*) inventory as a learning media on biodiversity material.

Pop-up books are printed media that are equipped with three-dimensional images, provide a more interesting visualization of the story, and when opened will display surprises in the form of paper that can rise or arise, shift left or right, and others (Arifatin, 2022; Fazira & Qohar, 2021; Rosanti et al., 2023). Visual illustrations in pop-up books can be used to clarify the material (Amalia & Setiyawati, 2020; Haryanto & Karyono, 2021) develop language appreciation, cognitive, and aesthetic skills (Elia et al., 2010).

This media can also make learning like a game that gives students the opportunity to participate in it. Pop-up books have many benefits for students, namely encouraging students to be more courageous and creative in imagination, attractive media, can motivate learning, easy to use, create focus, improve cognitive learning, easy to learn for children, and can illustrate images and explain text in an interesting way (Ahmadi et al., 2018; Mustaqim et al., 2021; Rahmawati & Rukiyati, 2018; Rohmawati & Pahlevi, 2023; Sari, 2017; Sari & Suryana, 2019). The advantages of this pop-up book are used in the learning process on biodiversity material.

Pop-up books are made according to student needs, curriculum demands, school environmental conditions, and biodiversity material. The presentation of biodiversity material on pop-up books is associated with the results of the inventory of bajakah plants in Sadok Hamlet, Landak Regency (Wahyudi et al., 2023). Information about bajakah diversity and its utilization by the community as medicine can be factual and contextual knowledge for students. This is based on the location of the school which is close to the bajakah plant habitat. So, that the pop-up book about the results of the bajakah plant inventory needs to be analyzed for feasibility as a learning media on biodiversity material in 10th grade of senior high school.

METHODS

The research method used is descriptive research. This research consists of making pop-up book media and validating pop-up book media as learning media. Pop-up book media contains biodiversity material for 10th grade of senior high school and the results of the inventory of bajakah plants in Sadok Hamlet, Landak Regency (Wahyudi et al., 2023). Pop-up book is designed using the Photoshop CS6 application program, printed using double sided matte inject paper 230 gsm, with a size of 21.0 cm x 29.0 cm, selecting the typeface Times New Roman regular, italic, and bold.

According to someone research, pop-up books are made through the following steps: determining learning objectives, determining the form of the pop-up book, making a summary of the material, designing a rough draft, choosing appropriate colors, and determining the size and shape of the appropriate letters (Muthoharoh & Jati, 2022). This research consists of three stages, namely preparation, implementation, and data analysis.

The preparation stage in the form of making pop-up book media starts from analyzing Core Competencies (*Kompetensi Inti*, KI) and Basic Competencies (*Kompetensi Dasar*, KD), making pop-up book drafts, guiding pop-up book designs, making pop-up books, determining pop-up book validators, and validating pop-up books. The implementation stage is in the form of pop-up book validation activities which consist of two stages, namely instrument validation and pop-up book media validation. Validation of pop-up book media instruments uses a Guttman scale. On the instrument validation sheet, there are two aspects that are assessed, namely language and construction. Furthermore, the validation of pop-up book media was assessed by five validators consisting of 2 Biology Education lecturers and 3 Biology teachers of 10th grade of senior high school. According to someone research, there are 6 aspects that are validated, namely aspects of consistency, format, organization, attractiveness, font size, and empty space (Arsyad, 2018). The pop-up book media validation sheet consists of 12 assessment criteria based on a Likert scale, namely Very Good (VG) worth 4, Good (G) worth 3, Less Good (LG) worth 2, and Not Good (NG) worth 1.

The final stage is in the form of validation results data analyzed using the Content Validity Ratio (CVR). The CVR analysis formula is:

$$\text{CVR} = \frac{Ne - \frac{N}{2}}{\frac{N}{2}} \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots \quad (1)$$

(Lawshe, 1975)

Description:
Ne is the number of experts who agree with the validity of the media (considered to agree if the value of each aspect with an average range of 3.00-4.00, if <3.00 then considered to disagree with the validity of the media). While N is the number of validators or expert team members.

After obtaining the CVR value, the Content Validity Index (CVI) value is then calculated to illustrate that the overall instrument items have good content validity. The CVI formula is as follows:

$$\text{CVI} = \frac{\Sigma CVR}{\Sigma n} \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots \quad (2)$$

(Lawshe, 1975)

Description:
ΣCVR is the sum of CVR values
Σn is the number of items in all aspects

If in the final calculation the CVR and CVI scores meet the minimum limit value of 0.99, the pop-up book teaching materials are declared valid and suitable for use as teaching materials in learning. If the CVI value is in the interval 0-0.99, then improvements to teaching materials can be made to certain criteria that are not valid.

RESULTS AND DISCUSSION

Pop-up book about the results of bajakah plant inventory in 10th grade of high school biodiversity material made consists of 40 pages. The pop-up book components consist of cover, preface, maker profile, instructions for use, KD, learning indicators, learning objectives, table of contents, biodiversity material, evaluation questions, glossary, and bibliography. This learning media is in the form of a book that can be shifted or opened on each sheet. Each page displays a description of the information presented. Information in the form of text and images that can arise or appear using special pop-up book techniques. There are three pop-up techniques used, namely lift the flaps, v-folding, and pull-tabs. The pop-up book display utilizing these techniques can be seen in Figure 1.

Figure 1. The pop-up book display: (a) front cover; (b) how to use page; (c) back cover; (d) example of lift the flaps page, (e) example of v-folding page, and (f) example of pull-tabs page

The uniqueness of the pop-up book display aims to attract students' attention to be enthusiastic in learning activities. Pop-up book media can be used directly by students in learning activities. This indicates that pop-up books can facilitate interaction between students and the knowledge they will acquire. Students can open, flip, drag, and slide each page with their hands while exploring each piece of information presented. This is in accordance with the assumptions in constructivist learning theory, the role of students is much more active than the role of educators in the learning process. According to someone research, in general, learning media has the purpose of generating an interest in learning and facilitating direct interaction between students and learning resources (Muthoharoh & Jati, 2022). In addition, several research results that have been conducted state that pop-up books can improve learning outcomes (Kunanti et al., 2021), improve memory (Damayanti & Yudiana, 2021; Rorimpandey, 2023), increase learning motivation (Putri & Yaswinda, 2022), and improve students' mastery of concepts (Akina et al., 2023; Rusanti et al., 2023).

In addition to the display of learning media, researchers also associate the findings of bajakah plant inventory research activities in Sadok Hamlet, Landak Regency with biodiversity material. This is motivated by the location of the school which is in the same area where bajakah plants grow. This local potential can be integrated into the learning process of biodiversity such as bajakah diversity as a level of biodiversity at the gene level, bajakah diversity as a level of biodiversity at the species level, and utilization of bajakah as a source of medicines. So that students' understanding of concepts related to biodiversity material can be taught concretely and contextually. Learning that utilizes local potential is known as local excellence education. The relevance of local excellence education to the real world encourages the formation of practical applications in contextual learning of biology (Hujjatusnaini et al., 2022; Juanda et al., 2021). Therefore, it is hoped that through learning biology, students will not only know the diversity of living things in their place of residence, but also learn about how to use and preserve it.

The pop-up book media made was then validated by validators to see the feasibility of using the media in learning biodiversity material. The acquisition of validation results data can be seen in Table 1.

Based on Table 1, it is known that the CVR value for twelve criteria is 0.99 and the CVI value obtained is 0.99. This value indicates that the learning media is suitable for use. The validation results show that there are three aspects that are reviewed, namely consistency, format, and attractiveness which are further divided into twelve criteria.

In the first criterion: the size of the sub-chapter uses the size and typeface and bold font with a font size of 30 so that it is easy to read. The results of the analysis obtained a CVR value of 0.99 valid, pop-up book media made bold fonts with a font size of 30 provide comfort to readers. According to someone research, the use of decorative fonts has irregular characteristics, is not suitable or difficult to read so it must be considered in the use of fonts (Muthoharoh & Jati, 2022).

Furthermore, in the second criterion: the content uses the size and typeface with font size 12 so that it is easy to read. The results of the analysis obtained a CVR value of 0.99 valid, the size of the typeface with font 12 is easy to read. Pop up books made must use a standard font size that is not too large or small (Ramadhani et al., 2018; Susi et al., 2023).

Furthermore, in the third criterion: clarity of instructions for using pop-up book media. The results of the study obtained a CVR value of 0.99 valid, the instructions made for readers in operating the use of pop-up book media are easy to understand. The use of pop-up book media for the material contained in it will make students become more focused in observing the contents of the pop-up book. The purpose of use is the instructions for each sheet in the pop-up book media (Sari, 2017).

Furthermore, in the fourth criterion: pop-up book media is arranged systematically. The results of the analysis obtained a CVR of 0.99 valid, pop-up book is made based on learning objectives and content systematically and interestingly expected to achieve learning objectives.

Selection of good learning media can improve communication and the effectiveness of achieving learning objectives (Widodo, 2018).

Furthermore, the fifth criterion: the suitability of pop-up book media size for group learning of 3-4 people. The results of the analysis obtained a CVR value of 0.99 valid, in other words, the pop-up book media made can be used for group learning of 3-4 people. Pop-up books are suitable for small groups or individuals with a size of 21.0 x 29.7 cm (Lestari et al., 2020).

Furthermore, on the sixth criterion: pop-up book media is printed using double side mate injet paper 220 gsm. The analysis results obtained a CVR value of 0.99 valid. The pop-up book media made using double side mate injet paper 220 gsm, aims to make the image display clearer and more attractive, so it is not torn or torn. According to someone research, the quality of paper used in learning media needs to be considered so that the results are as desired (Muthoharoh & Jati, 2022).

Furthermore, the seventh criterion: the suitability of pop-up book media with basic competencies and learning objectives. The analysis results obtained a CVR value of 0.99 valid. The media made is in accordance with the basic competencies and learning objectives. According to someone research, learning media should need to be studied further in order to achieve learning objectives (Muthoharoh & Jati, 2022).

Table 1. Pop-up book media analysis data

Aspect	Criteria	Validator					CVR	Description
		1	2	3	4	5		
Consistent	1. Sub chapters use font size and typeface and bold font with a font size of 30 so that it is easy to read	4	4	3	3	4	0.99	Valid
	2. Contents use font size and typeface with font size 12 so it is easy to read	4	4	4	4	4	0,99	Valid
Format	3. Clarity of instructions for using pop-up book media	4	4	3	4	3	0,99	Valid
	4. Pop-up book media is organized systematically	3	3	3	3	4	0,99	Valid
	5. Appropriateness of pop-up book media size for group learning 3-4 people	3	4	3	3	4	0,99	Valid
	6. The pop-up book media is printed using double side mate injet paper 220gsm.	3	3	3	3	3	0,99	Valid
	7. Suitability of pop-up book media with basic competencies and learning objectives	4	4	3	4	4	0,99	Valid
	8. Suitability of pop-up book media there are references as a bibliography	4	3	3	3	4	0,99	Valid
	9. Completeness in the delivery of bajakah plant information from research results	4	4	4	4	4	0,99	Valid
Attractiveness	10. Clarity of display of bajakah plant diversity images	3	3	4	3	4	0,99	Valid
	11. The use of language in pop-up book media is in accordance with the rules of the General Guidelines for Indonesian Spelling (PUEBI).	3	4	4	4	3	0,99	Valid
	12. The effectiveness of the sentences used in the pop-up book media is based on the General Guidelines for Indonesian Spelling (PUEBI).	4	3	3	4	3	0,99	Valid
	CVI						0,99	Valid

Description: CVR = Content Validity Ration; CVI = Content Validity Index

Furthermore, in the eighth criterion: the suitability of pop-up book media there are references as a bibliography. The analysis results obtained an average CVR of 0.99 valid. Learning media has learning resources aimed at clarifying the description poured into the media so that it can increase the knowledge gained. Learning activities or learning resources, is a set of learning to increase effectiveness, efficiency, and fun for the continuity of learning.

Furthermore, on the ninth criterion: completeness in the delivery of information on bajakah plants as a result of research. The results of the analysis obtained an average CVR of 0.99 or valid, the completeness of the description and images on the learning media is well organized. According to someone research, good learning media in its presentation contains messages, information, and images so that it looks complete, aiming to achieve learning objectives (Muthoharoh & Jati, 2022).

Furthermore, on the tenth criterion: the clarity of the display of bajakah plant diversity images. The analysis results obtained an average CVR of 0.99 valid. Images presented on learning media must pay attention to alignment, so that they look clear to the eye. Visualization in the form of images is a way that is presented in pop-up book media, in its presentation the image needs to be considered for clarity so that it looks attractive to readers (Anggraini et al., 2019)

Furthermore, on the eleventh criterion: the use of language and sentences in pop-up book media in accordance with the rules of the General Guidelines for Indonesian Spelling (*Pedoman Umum Ejaan Bahasa Indonesia*/PUEBI). The analysis results obtained an average CVR of 0.99 valid. Good learning media must pay attention to the use of correct sentences, so that the delivery of information to be conveyed is easily understood by the reader. Information to be conveyed, oral or written, should use PUEBI, so that it is easy to understand.

Furthermore, on the twelfth criterion: the effectiveness of the sentences used in the pop-up book media in accordance with PUEBI. The analysis results obtained an average CVR of 0.99 valid. The use of sentences in learning media must be straightforward and clear, so that the message presented is right on target or aligned. In written communication, more emphasis is placed on the use of sentences that are in accordance with good and correct grammar and rules, while in oral communication the sentence is said to be effective if the listener easily understands what the speaker is saying.

Pop-up books that have been declared suitable can be used by teachers in learning activities on biodiversity material for 10th grade of senior high school. As an example of implementing the use of pop-up books, teachers can design learning activities using discovery learning model. Pop-up book media is used by students at the data collection, data processing and verification stages. At the data collection stage, the teacher gives students the opportunity to collect as much relevant information as possible to prove whether the hypothesis is true or not (problem statement stage). The pop-up book created provides the information students are looking for. So, to collect this data, students must read the information contained in the pop-up book. Next, the data processing stage consists of processing and interpreting data and information that students have obtained through reading pop-up books (data collection stage). All information obtained is then processed according to the design of the learning objectives contained in the student worksheet. Data processing is also called coding or categorization which functions as concept formation and generalization. In this generalization activity, students will gain new knowledge about alternative answers or solutions that need to be proven logically. Finally, using pop-up books at the verification stage, students carry out careful examinations to prove whether or not the hypothesis that has been established with the findings is true by using pop-up books as a learning medium. Through this stage, the pop-up book media used can provide students with the opportunity to discover a concept, understanding, etc. through direct interaction.

The material contained in the pop-up book is prepared based on the results of KD 3.2 analysis, namely analyzing the results of observations regarding various levels of biodiversity (genes, types and ecosystems) in Indonesia as well as threats and conservation. Through this media, it is hoped that it can help students to achieve learning objectives such as explaining the

level of biodiversity, determining the level of biodiversity, and being able to analyze the benefits of biodiversity as medicinal plants and efforts to preserve Indonesia's biodiversity. Apart from that, pop-up books can also enrich students' knowledge, especially knowledge related to the local potential of the bajakah plant in Sadok Village, Landak Regency, West Kalimantan.

CONCLUSION

Based on the results of the research conducted, it can be concluded that the pop-up book media for biodiversity material obtained a CVR of 0.99 and a CVI value of 0.99 is declared valid. This value indicates that the pop-up book is feasible to use as learning media on biodiversity material for 10th grade of senior high school.

REFERENCES

Ahmadi, F., Fakhruddin, T., & Khasanah, K. (2018). The development of pop-up book media to improve 4th grade student's learning outcomes of civic education. *Asia Pacific Journal of Contemporary Education and Communication Technology, 4*(1), 42-50.

Akina, A., Paeri, D. N. R., Mufidah, M., & Nuraini, N. (2023). The implementation of pop-up book media: potential implication on mathematics and science learning outcomes. *Jurnal Penelitian Pendidikan IPA, 9*(5), 3824-3832.

Amalia, A., & Setiyawati, D. (2020). Application of pop-up book media to optimize science learning outcomes. *IJIS Edu: Indonesian Journal of Integrated Science Education*, *2*(2), 143.

Anggraini, W., Nurwahidah, S., Asyhari, A., Reftyawati, D., & Haka, N. B. (2019). Development of pop-up book integrated with quranic verses learning media on temperature and changes in matter. *Journal of Physics: Conference Series*, *1155*(1), 1-10.

Arifatin, F. W. (2022). A narrative inquiry study on language learning through pop-up book. *Ideas: Jurnal Pendidikan, Sosial, dan Budaya*, *8*(3), 1021-1028.

Arsyad, M. N. (2018). Penerapan media pembelajaran berbasis multimedia interaktif terhadap mahasiswa IKIP Budi Utomo Malang. *Agastya: Jurnal Sejarah Dan Pembelajarannya*, *8*(2), 188-198.

Damayanti, N. P. S., & Yudiana, K. (2021). Pop-up book media on the topic of plants' anatomy and physiology. *Jurnal Ilmiah Sekolah Dasar, 5*(3), 505-514.

Elia, I., van Den Heuvel-Panhuizen, M., & Georgiou, A. (2010). The role of pictures in picture books on children's cognitive engagement with mathematics. *European Early Childhood Education Research Journal*, *18*(3), 275–297.

Fazira, S. K., & Qohar, A. (2021). Development of pop-up book mathematics learning media on polyhedron topics. *Journal of Physics: Conference Series*, *1957*(1), 1-8.

Haryanto, S., & Karyono, T. (2021). Pop-up Book Illustration Art as Expressive and Artistic Communication Media. *3rd International Conference on Arts and Design Education (ICADE 2020)*, *519,* 4-8.

Hujjatusnaini, N., Corebima, A. D., Prawiro, S. R., & Gofur, A. (2022). The effect of blended project-based learning integrated with 21st-century skills on pre-service biology teachers' higher-order thinking skills. *Jurnal Pendidikan IPA Indonesia*, *11*(1), 104-118.

Juanda, A., Maulida, A. N., Gloria, R. Y., & Nasrudin, D. (2021). Learning observation: The demands of 21st century biology learning in Senior High School. *Jurnal Pendidikan Sains Indonesia (Indonesian Journal of Science Education)*, *9*(3), 445-458.

Kunanti, E. S., Syarifah, & Sutopo, A. (2021). The effect of pop-up book learning media and critical thinking on result students learning IPS class V elementary school. *International Journal of Education and Linguistics*, *1*(2), 580-595.

Lawshe, C. H. (1975). A quantitative approach to content validity. *Personnel Psychology*, *28*(4), 563-575.

Lestari, W. D., Yuhanna, W. L., & Lukitasari, M. (2020). Pengembangan media bio pop-up book terintegrasi Science, Environment, Technology, and Society (SETS) pada pembelajaran biologi materi daur biogeokimia. *JEMS: Jurnal Edukasi Matematika dan Sains*, *8*(2), 130-139.

Mustaqim, W. D., Putra, A. P., & Murti, T. (2021). Development of bilingual pop-up book media on javanese puppet stories for elementary school students. *Sekolah Dasar: Kajian Teori dan Praktik Pendidikan*. *30*(1), 77-87.

Muthoharoh, R., & Jati, S. S. P. (2022). Media pembelajaran e-scrapbook berbasis adobe photoshop materi peninggalan Hindu-Buddha di Kecamatan Ponggok. *Jurnal Integrasi dan Harmoni Inovatif Ilmu-Ilmu Sosial*, *2*(9), 855-867.

Ogundokun, M. O., & Adeyemo, D. A. (2010). Emotional intelligence and academic achievement: The moderating influence of age, intrinsic and extrinsic motivation. *10*(2), 127-141.

Puspitarini, Y. D., & Hanif, M. (2019). Using learning media to increase learning motivation in elementary school. *Anatolian Journal of Education*, *4*(2), 53-60.

Putri, V. M., & Yaswinda, Y. (2022). Developing scientific based pop up media for children speaking skill development. *6th International Conference of Early Childhood Education (ICECE-6 2021)*, *668*, 260-265.

Rahmawati, D. I., & Rukiyati, R. (2018). Developing pop-up book learning media to improve cognitive ability of children aged 4-5 years. In 4th International Conference on Early Childhood Education. *Semarang Early Childhood Research and Education Talks (SECRET 2018)*, *249*, 60-69.

Ramadhani, S. P., Amelia, W., & Mahardika, R. (2018). Development of Indonesian cultural environment education books to increase reading students' elementary school (interactive pop-up book Betawi culture). *International Journal of Innovative Science and Research Technology, 3(*7), 1-8.

Rohmawati, A., & Pahlevi, R. (2023). The effect of using inquiry learning model with pop-up book media on learning outcomes of primary school students. *Pedagogy: Indonesian Journal of Teaching and Learning Researc*h, *1*(1), 11-20.

Rorimpandey, R. (2023). Application of visual media pop-up book in english learning in elementary school. *Journal of English Culture, Language, Literature and Education*, *11*(1), 106-124.

Rusanti R., Deka, D., Naimah, N., Suyadi, S., & Putro, K. Z. (2023). Application of pop-up book media in developing children's linguistic intelligence. *Al-Ishlah: Jurnal Pendidikan*, *15*(2), 2200-2208.

Saadah, I. N., Hadi, S., Budiyanto, M. A. K., Rahardjanto, A., & Hudha, A. M. (2022). Development of articulate storyline learning media to improve biology learning outcomes for junior high school students. *Research and Development in Education (RaDEn)*, *2*(2), 51-56.

Sahronih, S., Purwanto, A., & Sumantri, M. S. (2020). The effect of use interactive learning media environment-based and learning motivation on science learning outcomes. *International Journal for Educational and Vocational Studies*, *2*(3), 1-5.

Sari, S. A. (2017). The Development of pop-up book on the role of buffer in the living body. *European Journal of Social Sciences Education and Research*, *10*(2), 213.

Sari, N. E., & Suryana, D. (2019). Thematic pop-up book as a learning media for early childhood language development. *Jurnal Pendidikan Usia Dini*, *13*(1), 43-57.

Susi, S. S., Sumarni, S., & Wati, E. R. K. (2023). Pop-up book media using adobe after effect material for ablution procedures in kindergarten. *Jurnal Edutech Undiksha*, *11*(1), 187-194.

Wahyudi, A., Syamswisna, S., & Yuniarti, A. (2023). Inventarisasi tumbuhan bajakah di Dusun Sadok Kabupaten Landak. *Konservasi Hayati*, *19*(1), 43-57.

Widodo, S. A. (2018). Selection of learning media mathematics for junior school students. *Turkish Online Journal of Educational Technology, 17*(1), 154-160.

Authors' Note

The authors declare that there is no conflict of interest regarding the publication of this article. Authors confirmed that the paper was free of plagiarism.

How to Cite this Article