# Bisma The Journal of Counseling

Volume 4 Number 2, 2020, pp 146- 153 ISSN: Print 2598-3199 – Online 2598-3210 Undiksha – IKI | DOI: http://dx.doi.org/10.23887/bisma.v4i1 Open Access https://ejournal.undiksha.ac.id/index.php/bisma



## Development of Achievement Motivation Instruments in High School Students

Gitta Citra Wedhayanti<sup>1\*</sup>), Ni Ketut Suarni<sup>2</sup>, Nyoman Dantes<sup>3</sup> <sup>123</sup>Universitas Pendidikan Ganesha e-mail: wedha1114@gmail.com, tut arni@yahoo.com, dantes nyoman@yahoo.com

Received Month 2020-08-02; Revised Month 2020-10-26; Accepted Month 2020-10-19; Published Online 2020-10-31

Conflict of Interest Disclosures:

The authors declare that they have no significant competing financial, professional or personal interests that might have influenced the performance or presentation of the work described in this manuscript.



Commons 4.0 Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. ©2017 by author Abstract: This study aims to describe the development of the Achievement Motivation in high school students. This research uses the Research & Development (R&D) method by using the 4D (four-D) model, define, design, develop, & disseminate. But in this study it was modified to 3D, which is define, design, and disseminate. Analysis of instrument validity using the formula CVR and CVI. Reliability test uses the Cronbach Alpha Formula. Based on the analysis it is known that there are 3 items that have a CVR value of 0.60 which are declared valid but need to be revised, and 57 items are declared valid. The instrument validity test results showed that CVI = 0.98 was declared special and the reliability of this instrument was 0.904 with a very high category.

Keywords: achievement motivation, instrument development, research and development

How to Cite: Gitta Citra Wedhayanti, Ni Ketut Suarni, Nyoman Dantes. 2020. Development of Achievement Motivation Instruments in High School Students. Bisma, 4 (2): pp. 146-153, DOI: http://dx.doi.org/10.23887/bisma.v4i1

## Introduction

The era of globalization that is happening at this time is very much having an impact on society, the economy, technology and even leading to the world of Education. The impact given to the world of Education is that students are required to be able to excel so that they are able to easily live life in this competitive era. In addition, students are the main pillars in the development of the State in this globalization era, where students who excel are qualified human resources who are able to create new things that are useful for the State. Looking at professionalism in many countries shows that the potential possessed by qualified human beings is more important than the abundant natural resources. However, in the last few decades, the

desire for competence that is owned by the Indonesian people among other nations is seen to be less likely, as seen in the comparison of the Human Development Index (HDI)

Students or human resources, of course, must have good quality in this era. This is because the low quality of human resources is one of the factors that will affect the quality of the education world because the goals in education as mandated in Law number 20 of 2003 concerning the National Education system are not achieved. The problem of the quality of human resources (HR) can be seen from several study reports conducted by the Program for International Students Assessment (PISA) in 2012. PISA conducted a review with participants as many as 65 countries around the world discussing education methods, and of 65 countries in the world regarding education methods and competencies held by school students with the results of Indonesia getting 64th out of 65 participating countries. Furthermore, in 2015, PISA conducted a review by expanding its territory to 76 countries and showing that Indonesia ranks 69th out of 76 countries (Fakhria, 2019).

Next is a review carried out by the Global Competitiveness Report of 2009/2010. The results of this review are that Indonesia ranks 54th out of 133 countries in terms of global competition from the quality of their education (Toding, David, & Pali, 2015).

Quality potentials owned by students can be achieved through quality education. Thus, efforts to improve the quality of education in order to improve the quality of students' potential cannot be delayed. One way is to increase achievement motivation possessed by students. This is because achievements that will improve student quality can be achieved if students have good achievement motivation.

The need to increase achievement motivation in students because there are still many students who have low achievement motivation, as many students often skip school and prefer to play with their friends outside school hours, students who more often play games and forget the school assignments given by the teachers. Students who prefer to be busy playing mobile phones, gossiping in class, streaming and so on during lessons (Ling Majaya, 2015). Brown et al (Affum-osei, Adom, Barnie, & Forkuoh, 2014) admits that growing motivation among students still remains a challenge. This is because the enthusiasm of some students to learn is still unpredictable.

As with the results of an interview conducted by a high school teacher, the results obtained here show that the lack of achievement motivation possessed by students is influenced by their easy access to the Internet (Fakhria, 2019). So, low or high student achievement can be influenced by whether or not the achievement motivation possessed by the student.

Achievement motivation is referred to as the need for achievement. Individuals will be motivated to achieve something when they are challenged and realize that the results will be a reflection of their personal successes or failures (Smith, 2015). Ormord (Saeid & Eslaminejad, 2016) explains that motivation in education can have several effects on how students learn and how they treat the subject matter they receive. Everyone certainly has a different level of motivation from each individual, there are high, low and medium motivations, and all of them will affect performance (Renata, Wardiah, & Kristiawan, 2018). In addition, achievement motivation is also important, this is because motivation will show different people's performance and behavior and subsequently people's behavior can be anticipated if motivation is recognized (Manafi, Movahhed, & Hejazi, 2016).

Achievement motivation is referred to as the need for achievement. Individuals will be motivated to achieve something when they are challenged and realize that the results will be a reflection of their personal successes or failures (Smith, 2015). Ormord (Saeid & Eslaminejad, 2016) explains that motivation in education can have several effects on how students learn and how they treat the subject matter they receive. Everyone certainly has a different level of motivation from everyone, there are high, low and medium motivations, and all of them will affect performance (Renata, Wardiah, & Kristiawan, 2018). In addition, achievement motivation is also important. This is because motivation will show different people's behavior can be anticipated if motivation is recognized (Manafi, Movahhed, & Hejazi, 2016).

The importance of achievement motivation can be seen from several studies, such as research conducted by Anthony Gbenro Balogu, Shyngle Kolawole Balogun and Chidi Victor Onyencho in 2017 with the results showing that achievement motivation has a positive impact on academic performance, and significantly moderates the relationship between anxiety tests and academic performance (Balogun et al., 2017). Another research that shows the importance of achievement motivation can be seen from the results of research conducted by Made Hery Wihardika Griadhi, Ni Ketut Suarni, AAI Ngurah Marhaeni, and I Made Sutajaya in 2018 namely achievement motivation has an influence on student achievement, and achievement

motivation mediates in student achievement. full influence of the quality of the library on learning achievement.

Motivation is an important predictor of the quality of student learning (Michou, Matos, Gargurevich, Gumus, & Herrera, 2016). Motivation according to Thodi is defined as the power that drives a person to reach the highest level in achievement and performance and to overcome obstacles to cause a change (Zhang et al., 2015).

Schunk (Griadhi, et al 2018) explains, "motivated students who are studying a topic tend to involve themselves in various activities that they believe will help them learn, such as paying attention during lessons, mentally organizing and memorizing the material to be learned, taking notes to facilitate subsequent learning activities, checking the level of understanding and asking for help when they don't understand the material "which means that students who are motivated in learning a topic tends to involve themselves in various activities that they believe will help them learn, such as paying attention during lessons, mentally organizing and memorizing the material to be learned, taking notes to facilitate further learning activities, checking the level of understanding and asking for help when they do not understand a material.

Achievement motivation according to Gesinde (Adegboyega, 2018) is one's determination to succeed in academic studies, including academic aspirations and attitudes towards schools, where achievement motivation refers to the pattern of actions and feelings associated with efforts to achieve some standard of internalization of excellence in performance. Achievement motivation is a multi-faceted relationship and complex processes that are interconnected, in the context of education. The importance of motivation and other affective processes cannot be overstated (Ferrell, Phillips, & Barbera, 2016).

According to Dweck and Elliot (Smith, et al, 2020) achievement motivation consists of various evaluations and estimates, estimates, conclusions, values, standards, which are determined from assumptions and emotional reactions that may be unreasonable, flawed, and contradictory. Larsen and Buss explained that achievement motivation was a desire to carry out better matters to solve problems or obstacles in an effort to achieve a goal (Dwi Sanderayanti, 2015).

Heckhausen (Hasbullah & Moeins, 2016) explains that achievement motivation is "achievement motivation is a drive contained within the individual who is always trying or struggling to improve or maintain their abilities as high as possible in all activities using the standards of excellence, thus reflecting a high need for achievement" (achievement).

Achievement motivation is theorized by McClelland as identifying three different needs, namely: (1) the need for achievement, (2) the need for affiliation, and (3) the need for power. These different needs are learned, obtained over time, and shaped by one's own life experiences (Karaman & Watson, 2017).

McClelland (Suarni & Martaniah, 2004) defines that there are five aspects of achievement motivation, including being responsible for the tasks they have, having creative and innovative thinking, choosing tasks based on their abilities, happy to get feedback on their work and trying to succeed. The rapid development of the times that occurred in this era, of course, also have an impact on the development of everyone, so that the instrument for measuring achievement motivation must be developed to optimize the results to be obtained.

The purpose of this study is to develop achievement motivation instruments in general and specifically. What are the dimensions and indicators that underlie the concept of achievement motivation and how are the validity and reliability of achievement motivation instruments? This study uses aspects of achievement motivation (Suarni, 2004), where the achievement motivation theory consists of five factors (aspects), and each aspect contains several indicators, namely: efforts to achieve success, success oriented, innovative, responsible, anticipating failure.

## Method

This research uses research and development methods. Subjects in this study consisted of experts or experts in the field of Counseling Guidance, namely 3 lecturers of Guidance Counseling at the Ganesha Education University, and 2 High schools Counseling Teachers (BK)

The variable used in this study is achievement motivation. Furthermore, the operational definition in this research is achievement motivation, which is a desire possessed by someone to do something to overcome the obstacles that he has to achieve the goals or achievements that he has set as standard in his life that even to be able to exceed the achievements of his friends. There are five aspects in the development of this instrument that refers to Suarni's theory (2004), namely: efforts to achieve success, success-oriented, innovative, responsible, anticipating failure (Suarni & Martaniah, 2004).

The research design used in this study is the 4-D (four D models) research design from Thiagarajan, which includes 4 stages: define, design, develop, disseminate (disseminate) (Permana, et al., 2019).

The first stage is defining, a stage where the researcher analyzes the needs of the product to be developed, analyzes the specifications of the subject that will be used in the study, and examines both theoretical and empiric references to get the concept of the developed variable, achievement motivation. The second stage, namely design, is the stage in which the researcher undertakes the design of a scale of achievement motivation in high-school students, which is based on the results of the review in the previous stage. There are several stages before the preparation of the instrument which is carried out systematically and structured, which starts from (1) the definition of the concept; (2) operational definition; (3) aspects; (4) louvers; (5) questions / statements and (6) assessment forms. The third stage is develop (development), in this research is the stage of developing research products. The development is based on the theories of experts and instruments of achievement motivation that already existed before. Furthermore, to determine the feasibility of the instrument of achievement motivation in high-school students, an expert test was conducted by five (5) experts in their respective fields. After getting input and evaluation from the experts, then some improvements were made to improve the research instruments from several aspects such as the use of appropriate sentences, the suitability of the items with the observed indicators.

The instrument developed in this study was an achievement motivation instrument. In this instrument divided into five aspects and broken down into 18 indicators. The total number of statements in the expert validation instrument for this achievement motivation instrument is 60 items. The instrument in this study uses a Likert Scale. Likert scale is a measurement used in evaluating the opinions, activities and perceptions of someone about an event that occurs in a community (Sugiyono, 2015). This instrument uses five answer choices, namely, (1) Very appropriate (SS), (2) Appropriate (S), (3) Inadequate (KS), (4) Unsuitable (TS) and (5) Very Unsuitable (STS).

The product developed was then tested for eligibility from the items in the developed questionnaire, using the Formula Lawshe test (1975). Lawshe's CVR (Content Validity Ratio) is one of the methods used to measure content validity. The measurement of the anxiety instrument developed involved 5 experts / practitioners who were experts in their fields. The data analysis technique used is the Lawshe CVR and CVI formulas, with the formula:

$$CVR \text{ Formula}$$
$$CVR = \frac{ne - N/2}{N/2}$$

source: (Lawshe, 1975)

Information:

CVR = Content Validity Ratio

- n = The number of experts who declare relevant
- N = The total number of experts

The criterion of validity of whether or not the contents of the item refer to the minimum value of the CVR based on the number of experts involved in the assessment of the instrument being developed. Values generated between +1 to -1, the value + proves that half of the experts give an important value / essential to an item, where  $CVR \le 0$  items are stated to be more important, and the validity of the contents is also higher.

After getting the CVR value, then proceed with calculating the CVI (Content Validity Index). The CVI calculation is the average CVR value for all items. The CVI calculation uses the following formula:

$$CVI = \frac{\sum CVR}{k}$$

Source: (Lawshe, 1975)

Keterangan:CVI= Content Validity Index $\sum CVR$ = total content validity ratiok= number of items

According to Lawshe, a good CVI index is a score above 0.50. Meanwhile, if the CVI value obtained> 0.90 to 1 can be said to be a special CVI index.

After testing the CVR and CVI, proceed with testing the reliability of the instrument. In this study, researchers tested the reliability of achievement motivation instruments using the Cronbach Alpha formula but in this study, researchers used the help of SPSS version 16. The Alpha Cronbach formula is as follows:

$$\mathbf{r}_{ac} = \left(\frac{k}{k-1}\right) \left[ \mathbf{1} - \frac{\sum \sigma_b^2}{\sigma_t^2} \right]$$
  
Keterangan :  
$$\mathbf{r}_{ac} = \text{koefisien reliabilitas alpha cronbach}$$
$$\mathbf{k} = \text{banyak butir/item pertanyaan}$$
$$\sum \sigma_b^2 = \text{jumlah/total varians per-butir/item pertanyaan}$$
$$\sigma_t^2 = \text{jumlah atau total varians}$$

## **Results and Discussion**

This research is a research with the type of Research and Development (R&D) with the instrument developed is the scale of achievement motivation in high school students. The research model used in this study is a 4-D (four D models) development model (Thiagarajan, 1974), which consists of 4 stages, namely (1) define (definition) where at this stage the researcher carries out an analysis of product development and conducts theoretical and empirical literature studies to find concepts from variables to be developed, (2) design, what researchers do in this stage is designing achievement motivation instruments based on the results of the analysis conducted in the previous stage, and starting from the concept definition , operational definitions, aspects, grids, questions / statements and assessment forms, (3) develop (development) at this stage the product begins to be developed based on the theories of experts and achievement motivation instruments which are then tested the feasibility of the instrument with expert testing by 5 (five) experts in the field of guidance and counseling, (4) disseminate (dissemination) this stage product distribution. However, in this development research, the dissemination stage was not conducted by researchers because it was constrained by the presence of a COVID-19 pandemic.

The questionnaire is an assessment instrument that researchers use. In this study the questionnaire consisted of 60 statements. Based on the results of the calculation of the CVR index on each item items, it can be seen that from 60 item items on the instrument there are 3 item items that get a CVR value of 0.60, namely items 21, 36, and 53, so that it is declared valid but needs to be revised. These points were stated by experts as irrelevant, causing the calculation of CVR to be low because the items or items were not in accordance with the indicators or still could not represent the indicators presented. The items that get a CVR value of 60 0.60 have a value of CVR = 1 totaling 57 items and are declared Valid.

After getting the CVR value, then proceed with calculating the CVI (Content Validity Index). The CVI calculation is the average CVR value for all items. From the calculation results, the CVI value of 0.98 is

obtained. This value means that the content validity index of 60 items in this achievement motivation instrument is good, so that each item of achievement motivation instrument is strong and able to test the level of achievement motivation that students have well.

The next feasibility test conducted is the reliability test. The reliability test results obtained from this achievement motivation instrument amounted to 0.904. Where  $r11 \ge r$  table is  $0.904 \ge 0.880$  with a percentage of 5%. This shows that the level of reliability of achievement motivation instruments is very high. Thus, this achievement motivation instrument can be trusted because it can produce or have the same results in every experiment or when an experiment is carried out on other high-school students who succeed.

Based on the results of the instrument assessment carried out by experts, it is known that there are 3 items that have a CVR index  $\leq$  0.60 so that there is a need to revise these items using a more effective language, improve items that lead more to indicators, and the suitability of writing on the instrument.

There are limitations in this study so that the next researchers need to be anticipated, including: 1) There are still many items that have a CVR index  $\leq$  1, so that improvement is still needed in these items. For further researchers that are motivated to do similar research, they are encouraged to be more thorough and prioritize the use of language when making items. 2) The next limitation is that in this study, researchers only involved 3 expert experts (lecturers of Guidance and Counseling faculty) and 2 practitioners (BK teachers)

In this study, only 5 experts were involved consisting of experts and practitioners in the field of Counseling Guidance, and no distribution of instruments was carried out to high-school students. The next researcher is expected to be able to carry out the development method to the product distribution stage to high-school students so that the feasibility test obtained can be better.

### Conclusion

Based on the results of research and discussion that has been done, the following conclusions can be drawn; First, this research and development resulted in an instrument in the form of developing achievement motivation instruments for high school students. The research model used in this study is a 4-D development model (four D models), which includes 4 stages, namely define, design, develop, and disseminate. Second, the results of the validation of the experts in developing achievement motivation instruments in high school students have a content validity index (CVI) of 0.98, which means that this instrument is good and gets a reliability result of 0.904. Thus, the achievement motivation scale instrument for high school students developed has reached the acceptance criteria limit that can be used to determine the level of achievement motivation in high school students.

Based on these conclusions and research, some suggestions can be made as follows. First the next researcher is expected to carry out the stage of developing the 4-D method to the stage of dissemination to high school students. Second, for counseling guidance teachers to be able to use this achievement motivation instrument to determine the level of achievement motivation in high school students

#### Acknowledgment

The author would like to thank and appreciation as much as possible for all the help, guidance and contributions of all those who have worked hard for the development of this research. The author would like to thank the supervisors of this study, Prof. Dr. Ni Ketut Suarni, M.S., Kons, as the first supervisor, and Prof. Dr. Nyoman Dantes, as the second counselor who has always given all directions in this research. Next to Prof. Dr. Ni Ketut Suarni, M.S., Kons as the Head of Undiksha Counseling Postgraduate Program. Thank

you also researchers say to Dr. I Ketut Gading M.Psi, Kadek Ryan Sumarjaya Giri, S.Pd, and I Putu Arya Riana Putra S.Pd who has been prepared to test expert experts. As well as all other relevant parties that have provided support for this research have achieved the expected results.

## References

- Adegboyega, L. O. (2018). Influence of achievement motivation on Nigerian undergraduates' attitude towards examination. *International Journal of Instruction*, 11(1), 77–88. https://doi.org/10.12973/iji.2018.1116a
- Affum-osei, E., Adom, E. A., Barnie, J., & Forkuoh, S. K. (2014). Achievement motivation, academic selfconcept and academic achievement among high school students. *European Journal of Research and Reflection in Educational Sciences*, 2(2), 24–37.
- Balogun, A. G., Balogun, S. K., & Onyencho, C. V. (2017). Test Anxiety and Academic Performance among Undergraduates: The Moderating Role of Achievement Motivation. *Spanish Journal of Psychology*, 20, 1–8. https://doi.org/10.1017/sjp.2017.5
- Dwi Sanderayanti. (2015). Pengaruh Motivasi Berprestasi Dan Kemampuan Berpikir Kritis Terhadap Hasil Belajar Matematika Siswa Di Sdn Kota Depok. *Jurnal Pendidikan Dasar*, 6, 222–231.
- Fakhria, M. (2019). Motivasi Berprestasi Siswa Ditinjau Dari Fasilitasi Sosial Dan Ketakutan Akan Kegagalan. *Journal of Chemical Information and Modeling*, 53(9), 1689–1699. https://doi.org/10.1017/CBO9781107415324.004
- Ferrell, B., Phillips, M. M., & Barbera, J. (2016). Connecting achievement motivation to performance in general chemistry. *Chemistry Education Research and Practice*, 17(4), 1054–1066. https://doi.org/10.1039/c6rp00148c
- Griadhi, M., Marhaeni, A., Suarni, N. K., & Sutajaya, I. M. (2018). DigitalCommons @ University of Nebraska - Lincoln QUALITY TOWARDS ACHIEVEMENT MOTIVATION AND LEARNING ACHIEVEMENT OF UNDIKSHA STUDENTS ON BALI-INDONESIA. (September).
- Hasbullah, R., & Moeins, A. (2016). The Influnce of Professionalism, Achievement Motivation and Empowerment Against the Work Discipline and Its Implication on Teacher Performance. *International Journal of Business and Commerce*, *5*(6), 18–36. Retrieved from http://www.ijbcnet.com/5-6/IJBC-16-5601.pdf
- Karaman, M. A., & Watson, J. C. (2017). Examining associations among achievement motivation, locus of control, academic stress, and life satisfaction: A comparison of U.S. and international undergraduate students. *Personality and Individual Differences*, 111, 106–110. https://doi.org/10.1016/j.paid.2017.02.006
- Lawshe, C. H. (1975). A Quantitative Approach To Content Validity. A Paper Presented at Content Validity, a Converence Held at Bowling Green. *State Uneversity*, *28*(4), 563–575. https://doi.org/10.1111/j.1744-6570.1975.tb01393.x
- Ling Majaya. (2015). Beda Pendidikan Jaman Dulu dan Jaman Sekarang. Retrieved from Kompasiana website: https://www.kompasiana.com/lingmajaya/551931c8a333112115b659a9/beda-pendidikan-jaman-dulu-dan-jaman-sekarang
- Manafi, D., Movahhed, H., & Hejazi, Y. (2016). Analyzing the Role of Self-Esteem Dimensions in Student's Achievement Motivation (A Case of M.Sc. Students of Agriculture in Tehran University). *International Journal of Agricultural Management and Development*, 6(3), 319–325. https://doi.org/10.22004/ag.econ.262598
- Michou, A., Matos, L., Gargurevich, R., Gumus, B., & Herrera, D. (2016). Building on the enriched hierarchical model of achievement motivation: Autonomous and controlling reasons underlying mastery goals. *Psychologica Belgica*, *56*(3), 269–287. https://doi.org/10.5334/pb.281

- Permana, A. H., Muliyati, D., Bakri, F., Dewi, B. P., & Ambarwulan, D. (2019). The development of an electricity book based on augmented reality technologies. *Journal of Physics: Conference Series*, 1157(3). https://doi.org/10.1088/1742-6596/1157/3/032027
- Renata, Wardiah, D., & Kristiawan, M. (2018). The influence of headmaster's supervision and achievement motivation on effective teachers. *International Journal of Scientific and Technology Research*, 7(6), 44–49.
- Saeid, N., & Eslaminejad, T. (2016). Relationship between Student's Self-Directed-Learning Readiness and Academic Self-Efficacy and Achievement Motivation in Students. *International Education Studies*, 10(1), 225. https://doi.org/10.5539/ies.v10n1p225
- Sarangi, C. (2015). Achievement Motivation of the High School Students : a Case Study Among Different Communities of Goalpara District of Assam. *Journal of Education and Practice*, *6*(19), 140–145.
- Smith, R. L. (2015). A Contextual Measure of Achievement Motivation: Significance for Research in Counseling. VISTAS Online, 1(14), 1–11. https://doi.org/10.1038/nature04971
- Smith, R. L., Karaman, M. A., Balkin, R. S., & Talwar, S. (2020). Psychometric properties and factor analyses of the achievement motivation measure. *British Journal of Guidance and Counselling*, 48(3), 418– 429. https://doi.org/10.1080/03069885.2019.1620173
- Suarni, N. K., & Martaniah, P. P. D. S. M. (2004). Meningkatkan motivasi berprestasi siswa Sekolah Menengah Umum di Bali dengan strategi pengelolaan diri model Yates:: Studi kuasi eksperimentasl pada siswa kelas I SMU di Bali.
- Sugiyono, S. (2015). Metode penelitian pendidikan pendekatan kuantitatif, dan R&D. Alfabeta Bandung.
- Thiagarajan, S. O. (1974). Instructional development for training teachers of exceptional children: A sourcebook. *Journal of School Psychology*, 14(1), 75. https://doi.org/10.1016/0022-4405(76)90066-2
- Toding, W. R. B., David, L., & Pali, C. (2015). Hubungan Dukungan Sosial Dengan Motivasi Berprestasi Pada Mahasiswa Angkatan 2013 Fakultas Kedokteran Universitas Sam Ratulangi. *Jurnal E-Biomedik*, *3*(1). https://doi.org/10.35790/ebm.3.1.2015.6619
- Zhang, Z.-J., Zhang, C.-L., Zhang, X.-G., Liu, X.-M., Zhang, H., Wang, J., & Liu, S. (2015). Relationship between self-efficacy beliefs and achievement motivation in student nurses. *Chinese Nursing Research*, 2(2–3), 67–70. https://doi.org/10.1016/j.cnre.2015.06.001

#### Article Information (Supplementary)

#### **Conflict of Interest Disclosures:**

Counseling

The authors declare that they have no significant competing financial, professional or personal interests that might have influenced the performance or presentation of the work described in this manuscript.

First Publication Right: BISMA The Journal of

Copyrights Holder: <authors> <year>

https://doi.org/10.xxxx/xxxxx

Open Access Article | CC-BY Creative Commons Attribution 4.0 International License. Word Count:

