Universidad & ciencia
Vol. 14, No. 1, enero-abril, (2025)
ISSN: 2227-2690 RNPS: 2450
Universidad de Ciego de Ávila, Cuba

Social processes of youth boredom: Rational Emotive Behavior Therapy and Recreational Mathematics as solutions

Procesos sociales del aburrimiento juvenil: La Terapia Racional Emotiva Conductual y Matemática Recreativa como soluciones

Williams Basantes Valverde[1]
https://orcid.org/0000-0002-7352-6455
Sandra Tenelanda Cudco[2]
https://orcid.org/0000-0001-6215-9517
Daysi Astudillo Condo[2]
https://orcid.org/0000-0002-6608-9269
[1]Universidad Nacional de Educación a Distancia, Spain
[2]Universidad Nacional de Chimborazo, Ecuador
wbasantes2@alumno.uned.es stenelanda@unach.edu.ec
dastudillo@unach.edu.ec

Recibido: 2024/12/12 **Aceptado:** 2025/02/28 **Publicado:** 2025/04/01

Abstract

Introduction: contemporary dynamic society offers fun socialization features within an optimized youth model. However, the field of Mathematics establishes undeniable parallels between the cognitive aspect of the young and fatigue. **Objective** : to outline actions in favor of recreation and promotion of critical thinking skills. **Method** : as a foundation for Rational Emotive Behavioral Therapy it was possible to delimit emotional guidelines for the benefit of the psychological environment of a young person. **Results**: having discovered the great principle of boredom and applying emotional techniques, means dedicated to recreation were obtained. Such that, thus, mathematical techniques were noticed as a product of gaming; diverting boredom. At the same time, Recreational Mathematics was determined as a motor activity and Information and Communication Technologies as cognitive tools to provide a feasible solution. **Conclusion**: it was conceivable to minimize the occurrence of desertion by managing numerical complements as playful management; case of psychomotor, multicultural and heuristics.

Cite este artículo como:
Basantes Valverde, W., Tenelanda Cudco, S. y Astudillo Condo, D. (2025). Social processes of youth boredom: Rational Emotive Behavior Therapy and Recreational Mathematics as solutions. *Universidad & ciencia, 14*(1), 201-212.
URL: https://revistas.unica.cu/index.php/uciencia/article/view/8717
DOI: https://doi.org/10.5281/zenodo.15102384

Universidad & ciencia
Vol. 14, No. 1, enero-abril, (2025)
ISSN: 2227-2690 RNPS: 2450
Universidad de Ciego de Ávila, Cuba

Keywords: boredom; games; math; recreation; therapy

Resumen

Introducción: la sociedad dinámica contemporánea propone características de socialización divertida dentro de un modelo juvenil optimizado. Sin embargo, el ámbito de la Matemática instituye parangones innegables entre el aspecto cognitivo del joven y el cansancio. **Objetivo**: delinear acciones en favor de la recreación y promoción de las pericias del pensamiento crítico. **Método**: como fundamento a la Terapia Racional Emotiva Conductual fue posible delimitar lineamientos emocionales en bien del ámbito psicológico de un joven. **Resultados**: habiendo descubierto el gran principio del hastío y aplicando técnicas emocionales se obtuvieron medios dedicados a la recreación. Tal que, así se advirtieron técnicas matemáticas producto del gaming; desviando al tedio. A la par, se determinó a la Matemática Recreativa como una actividad motora y a las Tecnologías de la Información y Comunicación como herramientas cognitivas para dar solución viable. **Conclusión**: se logró minimizar el suceso de la deserción manejando los complementos numéricos como gestión lúdica; caso de heurísticos, multiculturales y psicomotores.

Palabras clave: aburrimiento; juegos; matemática; recreación; terapia

Introduction

When addressing the topic of study, youth boredom, it was necessary to resort to descriptive research as an analytical particularity. It is then that this research was directed towards dedicated portals; case of Web Bibliographic Databases. In this way, ResearchGate and Scopus endorsed the consulted Literature and thus, the purification of the citations was facilitated. In this regard, the DOI (Digital Object Identifier) index endorsed the validity of the determination of the bibliographic processes and consequently, the primary objective revealed the exclusion of youth boredom; conceiving Rational Emotive Behavioral Therapy and Recreational Mathematics as a pair of solutions in favor of a feasible solution.

Today, around the world, the negativity of the socialization paradigm is framed in youth boredom. Therefore, it must be considered as a social problem and treated with the attention it deserves by the actors; case of tutors and parents. Thus, from the

Cite este artículo como:
Basantes Valverde, W., Tenelanda Cudco, S. y Astudillo Condo, D. (2025). Social processes of youth boredom: Rational Emotive Behavior Therapy and Recreational Mathematics as solutions. *Universidad & ciencia, 14*(1), 201-212.
URL: https://revistas.unica.cu/index.php/uciencia/article/view/8717
DOI: https://doi.org/10.5281/zenodo.15102384

Universidad & ciencia
Vol. 14, No. 1, enero-abril, (2025)
ISSN: 2227-2690 RNPS: 2450
Universidad de Ciego de Ávila, Cuba

beginning and in an obligatory manner, it is essential to expel the idea of tedium; much more, if the Information and Communication Technologies (ICT) support this task. Insisting that, "... youth boredom, within any social environment, does not have to be overwhelming and the sentimentalism framed should not lead to dissatisfaction" (Wilson *et a*l., 2024, p. 51). Likewise, complacency among members of any community must be rejected and if this is considered a social indicator it must be considered a group attribute.

At the same time, it is essential to emphasize the thought that, "…a young person who works happily does so conscientiously and it is in this way that efficient work is guaranteed. That is to say, that, from this moment on, said person offers feelings of interest and commune with instructive topics" (Hill and Peuker, 2024, p. 1123). Due to this, the image is harbored that what is taught is not just theory and this is how the ideal is expressed that a study center is not just a collection of walls where knowledge is forged. Much more, when considering that every human being, of student age and for 8 hours a day, remains within the so-called prison of learning; leading to disgust and depression. It is then that the canon of the new model must be directed and transformed into a support for the philosophy of 'Good Living'. Which has advanced within the new millennium and has developed within the channel of the Knowledge Society (SC); Likewise, hand in hand with the Information Society (IS). So, perceptibly, by being guidelines for establishing skills and absorbing social paradigms, they produce entities within ubiquitous cognition and will abandon currents of disinterest everywhere.

Development

But then we must ask ourselves, ¿What is the best option to provide a quick solution to the boredom crisis in the classroom? However, the answer seems simple but it is not. Though, it can be started by strengthening commitments with the academy and considering active cooperation as a canon. In addition, visualize the reasons for the spread of boredom within educational centers at all levels; as well as the benefits offered by Rational Emotive Psychotherapy and numerical paradigms as a recreation against academic desertion.

Cite este artículo como:
Basantes Valverde, W., Tenelanda Cudco, S. y Astudillo Condo, D. (2025). Social processes of youth boredom: Rational Emotive Behavior Therapy and Recreational Mathematics as solutions. *Universidad & ciencia, 14*(1), 201-212.
URL: https://revistas.unica.cu/index.php/uciencia/article/view/8717
DOI: https://doi.org/10.5281/zenodo.15102384

Universidad & ciencia
Vol. 14, No. 1, enero-abril, (2025)
ISSN: 2227-2690 RNPS: 2450
Universidad de Ciego de Ávila, Cuba

Irrefutable Causes of Student Disinterest

While it is true that classroom boredom is not serious, it is also true that it causes harm in adolescence and this is unfortunately due to dropouts. Therefore, this concept remains latent in the educational field; as such, a cage intended for learning. Noting, in unison, that "…the teachers provide few situations of moderation; such as the master class. However, with this, only periods of time are completed and the young person's performance is not considered, much less their motor participation" (Beaupoil Hourdel, 2020, p. 183).

On this subject, in 2023, at Stanford University (USA), information was released on the so-called University Academic Boredom; this being segmented into timelines, worked through Big Data techniques and calculated based on Intelligent software; such as Apache Hadoop. Then, with the universe of (15031;100 %) it was evident that the word 'Boring' was the most desired by the students surveyed (10672;71 %), 'Exhausted' the second (3758; 25 %) and 'Others' the third (601;4 %). These terms were the cause of the appearance of disinterest in the classroom and, much worse, the abandonment of creativity, thus creating distance between psychomotor projects and preventing student participation.

Though, in the family environment, it is plausible that parents should motivate their children; they should even commit them to a more formal learning. So that, in an interactive way, students assimilate the knowledge imparted and that, gradually, they pick up the motivational terms. As long as there is two-way communication between immediate family members; parent and child. Above all, if the roles strive to transmit information and their deductions emanate integration of knowledge. Reiterating that the enjoyment of this methodology gives rise to cognitive satisfaction; everything, within ubiquitous learning. Starting that, said process, supports the early recognition of intellectual limitations and removes classroom disinterest with somewhat difficult subjects; of the Mathematics case. Let us remember then that most parents assume that teachers act, only, as instructors in difficult subjects; therefore, eliminating active cooperation and provoking yawning (Kuswanto *et al*., 2023; Mardiani *et al*., 2023; Yusri *et al.,* 2023).

Cite este artículo como:
Basantes Valverde, W., Tenelanda Cudco, S. y Astudillo Condo, D. (2025). Social processes of youth boredom: Rational Emotive Behavior Therapy and Recreational Mathematics as solutions. *Universidad & ciencia, 14*(1), 201-212.
URL: https://revistas.unica.cu/index.php/uciencia/article/view/8717
DOI: https://doi.org/10.5281/zenodo.15102384

Universidad & ciencia
Vol. 14, No. 1, enero-abril, (2025)
ISSN: 2227-2690 RNPS: 2450
Universidad de Ciego de Ávila, Cuba

It is then, when this two-way communication tends to solve frictions between educational actors; case of teachers and learners. Thus, finding solutions in the range of boredom and rebellion; the same, which may or may not occur in the classroom. So, it is when the classroom becomes monotonous and assimilates to progressive chronic boredom. This happens, in an uncomfortable way, because there is no motivation to abandon educational games[1] as a form of entertainment; forgetting, at least, about a therapy that addresses solutions.

Rational Emotive Behavior Therapy as a Cognitive Support

According to history, in the previous century, [Albert Ellis] was one of the most sought-after professionals in Psychology in the field of revolutionary theories within the area of emotionality. Therefore, his name is recognized as the creator of Rational Emotive Behavior Therapy (REBT)[2]. But it is sad to recognize that his theory also has detractors and countless of them do not believe his research. The same ones, "...who regularly contribute hypothesizes that do not agree with the improvement of some pathologies within the field of Clinical Psychology and Psychoanalysis; even without noticing the negative conditions of regular patients" (Cimino, 2023, p. 27).

Then, gradually, this Psychoanalysis begins with current epithets and proposes spiral theories for the benefit of Psychotherapy; such as Rational Emotive Therapy (RET)[3] and Cognitive-Behavioral Orientation (CBO)[4]. These theories encompass philosophical concepts and feed the thought that, "…any human being is not worried about thinking, but is worried about acting. Much more so, if the behavior and emotions come from recurrent Psycho-Pathological transmutations" (Burston *et al.,* 2023, p. 3240). Next, every social entity is responsible for its inner being; as long as the conscience is a generator of ideas that support its stability. After that, a strong relationship is presented between the currents of thought and emotional tendencies. This reveal, more than anything, cognitive alterations as a substantial cause to reinforce, in an erroneous way, behavioral reactions; it is here, when therapies arise in the area of Psychiatry. Likewise, the rationalism current is considered impractical and

[1] It refers to games aimed at the educational field.
[2] Treatment of problems related to a person's thinking and behavior.
[3] It is said of everyday emotional and behavioral events.
[4] Interrelates the emotion, the thought and conducts it with a human being.

Cite este artículo como:
Basantes Valverde, W., Tenelanda Cudco, S. y Astudillo Condo, D. (2025). Social processes of youth boredom: Rational Emotive Behavior Therapy and Recreational Mathematics as solutions. *Universidad & ciencia, 14*(1), 201-212.
URL: https://revistas.unica.cu/index.php/uciencia/article/view/8717
DOI: https://doi.org/10.5281/zenodo.15102384

Universidad & ciencia
Vol. 14, No. 1, enero-abril, (2025)
ISSN: 2227-2690 RNPS: 2450
Universidad de Ciego de Ávila, Cuba

unscientific. But, over the years, treaties and publications attest to the functionality of Rational Emotive Behavioral Therapy (REBT); which provides reliability and solution. Above all, with the ideal created by [Ellis] and its projection in the precepts of modern Psychotherapy. So, in the present time, fruits of the theory already indicated can be harvested and at the same time, motivational talks, together with priority attention to people in need of guidance, are only feasible if the new commandments of medicine provide non-vulnerable sections related to daily demands (Albert *et al.,* 2022; Bopp *et al.*, 2022; Zhang *et al*., 2022).

Thus, as a corollary, it is possible to assert that Rational Emotive Behavioral Therapy maintains non-divergent points of view. However, the normality of behavioral processes refers to social entities capable of adapting to everyday questions; as long as rational cases are enabled and irrational ones are discarded. That is, this happens when clinical pictures are not well applied; forgetting the educational area and its actors. Also noting that "...the application of an emotive Psychotherapy offers a variety of congruencies for the anatomical study of any person; above all, with an invaluable mental health" (Wampold and Flückiger, 2023, p. 37). Based on this, in the field of Multiple Intelligences (MI), a theory bent by [Howard Gardner] in 1994, Mathematical Logic (ML) is ruled as a playful area; capable of acting, cognitively, within the playful and numerical field.

Recreational Mathematics as Entertainment and Classroom Stimulation

Taking advantage of iCloud teaching, the relationship between Mathematics Didactics and Problem-Based Learning is becoming more and more evident every day. More than anything, within student skills and in these, classroom cognition tends to suppress the difficulties contracted by Problem Solving. In which, Mathematics plays a relevant role within the cognitive process of the student. Much more, if the ubiquitous system of its learning activates the motivational character and faces the role of its understanding. Therefore, it is unavoidable to redesign actions for the benefit of classroom recreation and the immense world of numbers. Subsequently, "...it can thus focus on the autonomous promotion of logical thinking of every student who sees classroom boredom as a sign of academic failure" (Hou *et al.,* 2023, p. 4351). In other

Cite este artículo como:
Basantes Valverde, W., Tenelanda Cudco, S. y Astudillo Condo, D. (2025). Social processes of youth boredom: Rational Emotive Behavior Therapy and Recreational Mathematics as solutions. *Universidad & ciencia, 14*(1), 201-212.
URL: https://revistas.unica.cu/index.php/uciencia/article/view/8717
DOI: https://doi.org/10.5281/zenodo.15102384

Universidad & ciencia
Vol. 14, No. 1, enero-abril, (2025)
ISSN: 2227-2690 RNPS: 2450
Universidad de Ciego de Ávila, Cuba

words, the methodical use of cognitive techniques that amalgamate the qualitative and quantitative is feasible. Consequently, based on this purpose, a contiguous description of what is happening to achieve transversality of actions must be made; but then, a diagnosis of needs must be made. Thus, that this evaluation determines the required results, promotes competencies and prioritizes performance.

Therefore, based on the above premises, the effects must be consistent with the recreational activities presented and the offer of a new methodology, against student boredom, must be conducive to the understanding of a cultured environment. Obviously, it must be a valid proposal that strengthens the promotion of current learning; obtaining social entities capable of being independent. But this conception must promote logical methods that support the achievement and strengthening of the iCloud pedagogical universe. At that moment, "…Recreational Mathematics must be innovative in meta-learning; favoring dynamic pedagogy and supporting, to a large extent, Reflective Critical Thinking (RCT) as a logical analyzer of patience to distrust" (Konstantinov and Semenov, 2021, p. 428).

In the same order, Recreational Mathematics, as a subdivision of Reverse[5] Pedagogy and being equitable, provides results in the acquisition of all enjoyable actions. Obviously, these will exploit knowledge with enthusiastic doctrines as a set of enabling skills and with an invitation to create innovative student environments (Chang *et al.,* 2023; Mehmood *et al.*, 2020; Perrotta *et al*., 2021). In such a way, that the student is kept awake through playful interactivity. That is to say, the consensus of the games[6] , together with their activities within a subtle classroom, provides mental acuity for the absorption of mathematical concepts and their contextualization. This is what Figure 1 shows applying Logical Mathematical Intelligence (LMI)[7] and counting the squares that a rhinoceros occupies; taking into account the relevance of the student and presenting content applicable to Higher Engineering.[8]

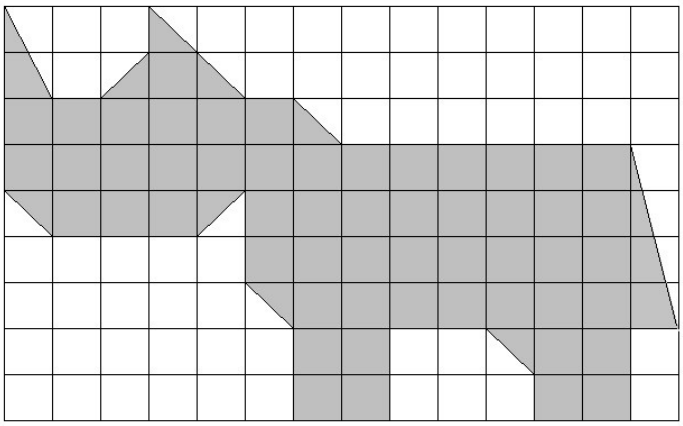
Figure 1

The Zoo's dilemma (2022)

[5] Standard of teaching that includes learning and doing; but without memorizing.
[6] Call this Gamification.
[7] Ability to use numbers and reason.
[8] With specialization in specific areas.

Cite este artículo como:
Basantes Valverde, W., Tenelanda Cudco, S. y Astudillo Condo, D. (2025). Social processes of youth boredom: Rational Emotive Behavior Therapy and Recreational Mathematics as solutions. *Universidad & ciencia, 14*(1), 201-212.
URL: https://revistas.unica.cu/index.php/uciencia/article/view/8717
DOI: https://doi.org/10.5281/zenodo.15102384

Universidad & ciencia
Vol. 14, No. 1, enero-abril, (2025)
ISSN: 2227-2690 RNPS: 2450
Universidad de Ciego de Ávila, Cuba



Note. Own authorship.

Therefore, the idea of applying Visual Spatial Intelligence (VSI), as a guarantee for games in the classroom, will always be plausible and, at this moment, collaborative work arises; together with cooperative work. As indicated in Figure 2, by promoting interaction between equals and the achievement of the objectives of any Degree. “This causes social skills in the classroom to foster effective communication and be based on collaborative work, in a unified way, to resolve conflicts” (Friedman *et al*., 2023, p. 182).

Figure 2

Reptiles (1943)

Note. Author: [Maurits Cornelis Escher] (Netherlands, 1898-1972).

Subsequently, the playful methods projected, with respect to the iCloud digital environment, must be framed in environments conducive to learning Mathematics; at least, the elementary one. This determines cutting-edge pedagogical strategies that

Cite este artículo como:
Basantes Valverde, W., Tenelanda Cudco, S. y Astudillo Condo, D. (2025). Social processes of youth boredom: Rational Emotive Behavior Therapy and Recreational Mathematics as solutions. *Universidad & ciencia, 14*(1), 201-212.
URL: https://revistas.unica.cu/index.php/uciencia/article/view/8717
DOI: https://doi.org/10.5281/zenodo.15102384

Universidad & ciencia
Vol. 14, No. 1, enero-abril, (2025)
ISSN: 2227-2690 RNPS: 2450
Universidad de Ciego de Ávila, Cuba

provide numerical precepts in a playful way and, if contextualized to the approach of motor activities, achieve tangible realities. Formerly, apart from the traditional theme, the procedural pedagogical edges offer clear samples of the continuous improvement of education in the new century; equally, at all levels. Much more, if their procedures support the playful functionality of numerical reasoning, the promotion of action and the solution to the social problem of boredom in the classroom.

Conclusions

In theory, this is how the actions carried out by the Recreational Mathematics area are emphasized. In such a way, the pedagogical strategies proposed in favor of academicism are strengthened and the interests of the students are optimized for ubiquitous learning. Then, the impact achieved in favor of abandoning boredom in the classroom is pointed out; but having as recommendation the active participation of the students.

But student participation encourages logical calculation and this is stimulating when it becomes an area of collaborative knowledge; at the same time, it becomes dynamic. Before, mathematical challenges promote social and behavioral approaches within learning; this, in every area where attitudinal processes support noteworthy improvements. In this way, classroom boredom is prevented; causing positive attitudes and critical thinking. So, Rational Emotive Behavioral Therapy (REBT) is the cognitive support that determines motivation and provides Recreational Mathematics (RM) with approaches; in this way, actions are carried out for the good of the classroom cognitive characteristic, preparing and awakening emotional skills. Subsequently, here we see academic collaboration and adherence to mathematical integrity as validation of the context. Previously, gamification, as a cognitive method, supports learning in the socio-pedagogical field of imparted data, gamification expands knowledge done rhetorical methodologies and common learning procedures; these being an attitudinal stage that accesses information.

This is the moment in which, within the adaptability of playful procedures, the relevance of Mathematics as a manager stands out. In this way, the student universe has flexible characteristics within the analysis and design of actions that address the

Cite este artículo como:
Basantes Valverde, W., Tenelanda Cudco, S. y Astudillo Condo, D. (2025). Social processes of youth boredom: Rational Emotive Behavior Therapy and Recreational Mathematics as solutions. *Universidad & ciencia, 14*(1), 201-212.
URL: https://revistas.unica.cu/index.php/uciencia/article/view/8717
DOI: https://doi.org/10.5281/zenodo.15102384

learning process; likewise, its implementation promotes knowledge as a 2.0 challenge.

Bibliographic references

Albert, SL, Massar, RE, Kwok, L., Correa, L., Polito Moller, K., Joshi, S., Shah, S., and McMacken, M. (2022). Pilot Plant-Based Lifestyle Medicine Program in an Urban Public Healthcare System: Evaluating Demand and Implementation. *American Journal of Lifestyle Medicine.* https://doi.org/10.1177/15598276221113507

Beaupoil Hourdel, P. (2020). Telling stories multimodally: what observations of parent-child shared book-reading activities can bring to L2 kindergarten teachers' training. *In Language learning and professionalization in higher education: pathways to preparing learners and teachers in/for the 21st century*. https://doi.org/10.14705/rpnet.2020.44.1105

Bopp, C., Salzmann, A., Volz Willems, S., Jäger, J., and Dupont, F. (2022). The Role of Providing Structure in a Family Medicine Curriculum for Undergraduate Medical Education. *Zeitschrift Fur Allgemeinmedizin*, *98*(11). https://doi.org/10.53180/zfa.2022.0396-0401

Burston, A., Miles, S.J., and Fulbrook, P. (2023). Patient and caregiver experience of living with a pressure injury: A meta-synthesis of qualitative studies. *In Journal of Clinical Nursing, 32*(13-14). https://doi.org/10.1111/jocn.16431

Chang, D.H., Lin, M.P.C., Hajian, S., and Wang, Q.Q. (2023). Educational Design Principles of Using AI Chatbot That Supports Self-Regulated Learning in Education: Goal Setting, Feedback, and Personalization. *Sustainability* (Switzerland), *15*(17). https://doi.org/10.3390/su151712921

Cimino, S. (2023). Some notes on the phenomenology of psychological disorders: from the birth of Freudian psychoanalysis to the possible contribution of multiple etiopathogenic factors. *Scandinavian Psychoanalytic Review*, *46*(1-2). https://doi.org/10.1080/01062301.2023.2281132

Friedman, Z.L., Hubbard, K., and Seruya, F. (2023). Building Better Teams: Impact of Education and Coaching Intervention on Interprofessional Collaboration Between Teachers and Occupational Therapists in Schools. *Journal of*

Cite este artículo como:
Basantes Valverde, W., Tenelanda Cudco, S. y Astudillo Condo, D. (2025). Social processes of youth boredom: Rational Emotive Behavior Therapy and Recreational Mathematics as solutions. *Universidad & ciencia, 14*(1), 201-212.
URL: https://revistas.unica.cu/index.php/uciencia/article/view/8717
DOI: https://doi.org/10.5281/zenodo.15102384

Occupational Therapy, Schools, and Early Intervention, *16*(2). https://doi.org/10.1080/19411243.2022.2037492

Hill, A., and Peuker, S. (2024). Expanding students' social networks via optimized team assignments. *Annals of Operations Research*, *332*(1-3). https://doi.org/10.1007/s10479-023-05492-2

Hou, H.T., Fang, Y.S. and Tang, J.T. (2023). Designing an alternate reality board game with augmented reality and multi-dimensional scaffolding for promoting spatial and logical ability. *Interactive Learning Environments*, *31*(7). https://doi.org/10.1080/10494820.2021.1961810

Konstantinov, N.N., and Semenov, A.L. (2021). Productive education in the mathematical school. *Chebyshevskii Sbornik*, *22*(1). https://doi.org/10.22405/2226-8383-2021-22-1-413-446

Kuswanto, AV, Wibowo, DV, and Setiawati, FA (2023). The Synergy of the Three Pillars of Education in Early Childhood Character Education. *Al- Athfaal : Jurnal Ilmiah Pendidikan Anak Usia Dini*, *6*(1). https://doi.org/10.24042/ajipaud.v6i1.16068

Mardiani, A., Ismail, H. Bin, and Ahmad, I.S. (2023). The Challenges in Inculcating Islamic values in the National Educational System in the Era of Globalization: A Case-Study at a Private Secondary School. *IJECA (International Journal of Education and Curriculum Application)*, *6*(2). https://doi.org/10.31764/ijeca.v6i2.14020

Mehmood, A., Marsden, T., Taherzadeh, A., Axinte, L.F. and Rebelo, C. (2020). Transformative roles of people and places: learning, experiencing, and regenerative action through social innovation. *Sustainability Science*, *15*(2). https://doi.org/10.1007/s11625-019-00740-6

Perrotta, C., Gulson, K.N., Williamson, B. and Witzenberger, K. (2021). Automation, APIs and the distributed labor of platform pedagogies in Google Classroom. *Critical Studies in Education*, *62*(1). https://doi.org/10.1080/17508487.2020.1855597

Wampold, B.E. and Flückiger, C. (2023). The alliance in mental health care:

Cite este artículo como:
Basantes Valverde, W., Tenelanda Cudco, S. y Astudillo Condo, D. (2025). Social processes of youth boredom: Rational Emotive Behavior Therapy and Recreational Mathematics as solutions. *Universidad & ciencia, 14*(1), 201-212.
URL: https://revistas.unica.cu/index.php/uciencia/article/view/8717
DOI: https://doi.org/10.5281/zenodo.15102384

conceptualization, evidence and clinical applications. *World Psychiatry*, *22*(1). https://doi.org/10.1002/wps.21035

Wilson, CD, Haudek, KC, Osborne, JF, Buck Bracey, ZE, Cheuk, T., Donovan, B.M., Stuhlsatz, M.A.M., Santiago, M.M. and Zhai, X. (2024). Using automated analysis to assess middle school students' competence with scientific argumentation. *Journal of Research in Science Teaching*, *61*(1). https://doi.org/10.1002/tea.21864

Yusri, R.D., Fauzan, A., and Yarman. (2023). Analysis of Students' Mathematics Learning Difficulties During Online Learning Using Zoom Meeting (Case Study on Students Who Has Low Interest in Learning Mathematics). *AIP Conference Proceedings*, *2805*(1). https://doi.org/10.1063/5.0150110

Zhang, J.Y., Liu, Y.J., Shu, T., Xiang, M. and Feng, Z.C. (2022). Factors associated with medical students' self-regulated learning and its relationship with clinical performance: a cross-sectional study. *BMC Medical Education*, *22*(1). https://doi.org/10.1186/s12909-022-03186-0

Interest conflict

The authors declare no conflicts of interest.

Cite este artículo como:
Basantes Valverde, W., Tenelanda Cudco, S. y Astudillo Condo, D. (2025). Social processes of youth boredom: Rational Emotive Behavior Therapy and Recreational Mathematics as solutions. *Universidad & ciencia, 14*(1), 201-212.
URL: https://revistas.unica.cu/index.php/uciencia/article/view/8717
DOI: https://doi.org/10.5281/zenodo.15102384