INNOVATING STUDENT ADMISSION USING NEUROSCIENCE PERSPECTIVE: LEARNING FROM MUHAMMADIYAH VOCATIONAL SCHOOLS

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ABSTRACT:

The pandemic COVID-19 has opened new horizons in all parts of the world, including in education. Educational institutions must make breakthroughs related to the number of student admissions, which has decreased significantly, especially at Vocational School of Muhammadiyah 3 Yogyakarta. The purpose of this study was to find a promotion model for student admissions from a neuroscience perspective at Vocational School of Muhammadiyah 3 Yogyakarta. This study uses a qualitative method. The subjects of this study were the principal, the vice principal for student affairs, the vice principal for public relations, the head of the admission committee, and the prospective students. Researchers used observation, interviews, and documentation as data collection techniques. The data were analyzed using the Miles and Huberman model, namely data reduction, display data, and conclusion. This study indicates that neuroscience as a brain approach (cortex prefrontal) can attract the sympathy of prospective new students to study at Vocational School of Muhammadiyah 3 Yogyakarta. It is a solution to meet the target group for majors at school. This research has implications for school management and Islamic education management in student admission department.

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ABSTRAK:

Adanya pandemic COVID 19, membuka *cakrawala* baru di seluruh belahan dunia termasuk dalam ranah pendidikan. Lembaga pendidikan harus melakukan trobosan baru terkait jumlah penerimaan peserta didik baru yang menurun secara *signifikan*, khususnya di Sekolah Menengah Kejuruan Muhammadiyah 3 Yogyakarta. Tujuan penelitian ini menemukan model promosi penerimaan peserta didik baru dalam perspektif neurosains di Sekolah Menengah Kejuruan Muhammadiyah 3 Yogyakarta. Penelitian ini menggunakan metode kualitatif. Subjek penelitian ini adalah kepala sekolah, wakil kepala bidang kesiswaan, wakil kepala bidang humas, ketua panitia penerimaan siswa baru, dan calon siswa. Peneliti menggunakan observasi, wawancara, dan dokumentasi sebagai teknik mengumpulkan data. Data dianalisis menggunakan model Miles dan Huberman, yaitu data *reduction*, data *display*, dan data *conclusion*. Hasil penelitian ini menunjukkan bahwa neurosains sebagai pendekatan otak (*cortex prifrontal*) dapat menarik simpati calon peserta didik baru agar sekolah di Sekolah Menengah Kejuruan Muhammadiyah 3 Yogyakarta. Hal ini menjadi solusi untuk mencukupi target *rombongan belajar* di sekolah. Penelitian ini berimplikasi terhadap manajemen sekolah dan manajemen pendidikan Islam dalam aspek penerimaan peserta didik baru.

Kata Kunci: COVID-19; neurosains; penerimaan siswa baru; inovasi model penerimaan siswa.

INTRODUCTION

Management of new students is not only in the form of student data records but also includes broader aspects to improve and develop all abilities possessed by students through the education process in schools. (Hendro Widodo & Nurhayati, 2020). Arikunto and Yuliana emphasized that not everything related to students provides student management, but it also contains other directions. (Mirela et al., 2021). Grouping students to form study groups, including curriculum management. However, recording student learning outcomes can be categorized as student management. Ari Kunto emphasized that he saw that there were four management scope groups during the school entry process until students left it (Hendro Widodo & Nurhayati, 2020).

Acceptance of new students is essential for a school because this event is the starting point that determines the smoothness of the task of a school (Widodo, 2019). There are three pathways in the admission of new students: 1. The regular track, 2. The Special Intelligent Pathway (CIBI). This pathway must obtain a letter of assessment results from the psychological consulting unit; and c) Pathways of achievement, both academic and non-academic (Dinana et al., 2021). Management of errors in accepting new students can determine the success or failure of the school's business (Widodo, 2018). The duties of the admissions committee include 1. They are ensuring the number of students



accepted. 2. Determine the terms of acceptance of new students; 3. Carry out filtering; 4. Holding announcements of acceptance; 5. Re-registration of candidates who have been accepted; 6. Reporting the results of his work to the school leadership; and 7. Student administration (Rahman et al., 2020).

The main problem in this study is the decline in the number of new student admissions in Muhammadiyah schools, especially explicitly at SMK Muhammadiyah 3 Yogyakarta. Acceptance of a small number of students will affect school management policies related to school budget income, which specifically impacts the welfare of teachers and employees. In line with this, the presence of the COVID-19 pandemic affected the process of implementing the acceptance of new prospective students.

Before the COVID-19 pandemic, new students at SMK Muhammadiyah 3 Yogyakarta reached 400-500 students for all class X (Ten) classes (study groups). However, in the 2020 Academic year, when the COVID-19 pandemic, new students were reduced to 250 people. It is influenced by the impact of COVID-19 on the socio-economic community (Machali et al., 2021). In addition, promotions carried out by schools to the community are still conventional and less creative, so they do not attract public interest to send their children to these schools. Thus, COVID-19 opens new horizons throughout the history of education which significantly affects the psychosocial and neurospirituality of the social stratification of Indonesian education related to the acceptance of new students (Suyadi et al., 2020).

Schools need to change the promotion model used to overcome that problem. It can be done by forming a team that will promote the school through social media and effectively uses its website. The promotion model can be done using a neuroscience approach.

Etymologically, neuroscience is a neural science that studies the nervous system, especially looking neurons or nerve cells, with a multidisciplinary approach. (Suyadi, 2020). Terminologically, neuroscience is a field of science specializing in the nervous system's scientific study. Neuroscience is also referred to as studying the brain and all the spinal cord functions (Suyadi & Widodo, 2019).

In the perspective of neuroscience, the human brain consists of three dimensions known as the three-dimensional brain, namely a normal brain, a

healthy brain, and an intelligent brain. The terms standard and healthy brains have been scattered in various neuroscience literature studies. However, an adequate meaning for the word has not been found. It is often used interchangeably so that it seems to overlap (Akkurt, 2021) and the intelligent brain (Jailani, Wantini, et al., 2021). Nevertheless, each has a different reposition (Suyadi, 2017).

Intelligent thinking is not partial-particular thinking, namely rational thinking only, emotional, or spiritual only. However, innovative thinking is thinking as a whole, namely rationally, emotionally, and spiritually at the same time. Philosophers introduce radical ways of thinking through ethics (goodbad), aesthetics (beautiful-ugly), and logic (right-wrong). (Jailani, Suyadi, & Muallimah, 2021). Radical thinking is critical, ethical, and aesthetic thinking (Suyadi, 2020). Therefore, the result of this three-dimensional brain development process will be able to achieve the essence of education itself, namely the nation's intellectual life (Shalihin et al., 2021).

Schools need to approach and guide students to make them good individuals (Jailani, Suyadi, & Djubaedi, 2021). A good approach and guidance to students from a neuroscience perspective depend on the brain's ability (Jailani, Suyadi, & Bustam, 2021). In this case, the school can take action according to the existing brain function (Jailani, Widodo, et al., 2021). Likewise, in attracting public attention to schools, schools can carry out promotions by activating the cognitive-affective realm of the community, either through conveying the school's strengths or by motivating prospective new students.

So far, a lot of research on the management of new student admissions during the COVID-19 pandemic has been carried out. Wahyono et al. researched the process of accepting new students online (Wahyono et al., 2020; Al-khowarizmi, Maulana, and Basit, 2020). Rahayu et al., and Sofia, et al. also studied that the online admissions process for new students can be done through a website-based system equipped with a registration, selection, and announcement process. This website can be accessed from the home of each prospective student (Rahayu et al., 2021) to prevent the spread of COVID-19 (Sofica et al., 2020).

This research is a development of previous studies on implementing online new student admissions to overcome the spread of COVID 19. This study



aims to find a promotion model in attracting public attention to send children to SMK Muhammadiyah 3 Yogyakarta. This promotion model is made using a neuroscience approach in psychosocial aspects

METHODS

This study uses a qualitative method to understand and describe the new student admissions promotion model (PPDB) at SMK Muhammadiyah 3 Yogyakarta from a neuroscience perspective. The research subjects consisted of the principal, vice-principal of the public relations department, the head of the PPDB, and several prospective new students. Determination of issues is done considering that they are considered the most understanding about what we expect. It will make it easier for researchers to explore the object/social situation under study (Setyowati, 2015).

Data collection techniques were carried out using in-depth interviews, open and closed observations, and documentation. This type of data analysis uses the Miles and Huberman model, namely data reduction, data presentation, and concluding (data verification). Activities in qualitative data analysis are carried out interactively and take place continuously until complete (Sugiyono, 2012).

FINDINGS

The marketing management of SMK Muhammadiyah 3 Yogyakarta, which is carried out to promote new student admissions, is under the auspices of the vice-principal of the school's Public Relations section. School public relations is tasked with promoting the community by conveying the school's advantages, achievements, and advantages. The promotion model used leads to a neuroscience approach.

This approach aims to activate the cognitive-affective domain of prospective students and their parents. The human brain that responds to this domain is its Prefrontal Cortex (frontal lobe), located in the forebrain. This part of the brain cooperates with the limbic nerve cells transferring blood cells to the brain. These cells will be suitable according to the given stimulus. The school's public relations team conveys positive things about schools to prospective students and their parents. For example, achievements, offers of school fees, facilitating the school enrollment process, and other benefits



obtained when attending SMK Muhammadiyah 3 Yogyakarta can raise the realm of their cognition. In addition, Public Relations also provides views, motivation, and understanding of the importance of school to prospective new students. Thus, psychosocial and neurospiritual prospective students and their parents will be interconnected.

Implementation of the Promotion of New Student Admission during the Covid-19 Period

The school's Public Relations team, which the Deputy Head of Public Relations commands, has made various efforts, and alternative efforts to make PPDB activities successful in 2021. It has been done online and offline. Online, the efforts made are making school websites and distributing brochures/info about schools through WhatsApp Group media. School brochures can be seen in Figures 1 and 2, and promotions through WhatsApp media are in Figure 3. While offline, efforts are being made to place school posters and banners at several permitted locations (Irman Tri Buana Sakti, 2021).



Figure 1. Brochure (Front View) Admission of New Students during the COVID-19 Period (Waka Humas, 2021).





Figure 2. Brochure (Back View) Admission of New Students during the COVID-19 Period (Waka Humas, 2021).

In addition, the PR team also distributed brochures to SMP or MTs offline and online, both public and private. Besides distributing leaflets, the team also held virtual and online presentations (Tim Promosi PPDB, 2021). Usually, schools distribute and provide brochures to schools that have collaborated with SMK Muhammadiyah 3 Yogyakarta, as evidenced by the signing of the MoU. It is generally carried out as a facility to attract sympathizers of prospective new students. One of the schools that cooperates with SMK Muhammadiyah 3 Yogyakarta is SMP Muhammadiyah 7 Yogyakarta (Kepala Sekolah, 2021).

Educators and all school staff/employees also distributed PPDB brochures provided by the PR team, both online and offline. It is an innovative and creative promotional action during the pandemic. The brochure also contains school fees (Figure 1) which consists of DPP donations, re-registration fees, and discounted fees for batch 3. The total cost is very affordable, namely Rp. 3,955,000 - with the convenience and existing facilities. The school, especially the PPDB Committee, provides fee waivers, so that prospective new students and parents are not burdened. The facilities in question include school dormitories, industrial standard workshops/labs, complete and modern workshop/lab equipment, finding rents/boarding houses around the school,

guidance on entering your favorite college, and work assistance after graduation (Ketua PPDB, 2021).

The Deputy Head of Public Relations created a group via WhatsApp (Figure 3). The group also aims to communicate ideas, strategies, inputs, and concepts related to school promotion in accepting new students.

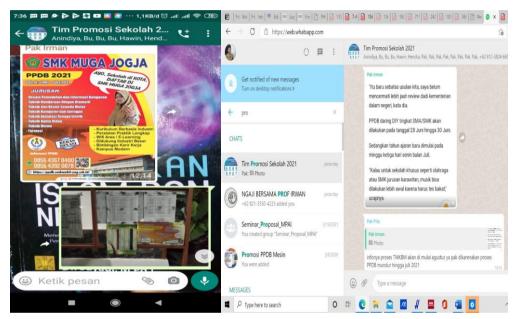


Figure 3. PPDB Promotion WhatsApp Groups (Tim Promosi, 2021).

Neuroscience Approach in Promotional Model for New Student Admission

In carrying out promotions, schools must have creative strategies to attract new prospective students, especially when faced with the COVID-19 pandemic. The promotion strategy carried out with a neuroscience approach must have a stimulus that can stimulate the brains of prospective students and their parents. In neuroscience, the given stimulus plays an essential role in responding to the information it receives. The stimulus can be in the form of providing motivation in improving learning and achieving the desired goals. The motivation is conveyed in wise, kind, and caring words, so that it can be



responded positively, so that it can stimulate the cognitive-affective realm of prospective students and their parents.

Furthermore, the Public Relations team conveyed the advantages possessed by the school and offered school fees with a record that it was not burdensome for students and their parents. Delivering something that has a positive impact can encourage the person to act well. By providing a positive stimulus, prospective new students can respond well to the information conveyed by the Public Relations Team of SMK Muhammadiyah 3 Yogyakarta.

The Public Relations team also carried out promotions by visiting the homes of several prospective students according to information from teachers and employees of SMK Muhammadiyah 3 Yogyakarta. Promotion of prospective students and their parents is carried out using a neuroscience approach in psychosocial aspects. One of the prospective students comes from a family affected by COVID-19. Both parents lack the funds to continue their education (Calon Peserta Didik Baru, 2021).

Seeing this situation, the PPDB Public Relations Team took a psychosocial approach by inviting both parents not to stress and worry about school fees. It can be seen in the quote conveyed by the PR team to the parents:

"mtoben nopo" bu anak Ibu sekolah saja di SMK Muhamamdiyah 3 Yogyakarta, disana biaya sangat terjangkau dan masih bisa diangsur oleh Bapak Ibu dan adik, monggo sekolah di SMK Muhammadiyah 3 Yogyakarta, Insyaalah kami terima yang penting anak Ibu/Bapak punya kemauan dan betul-betul ingin sekolah, mudah-mudahan Allah Swt memberi rezeki dan solusi yang baik pada bapak ibu".

The communication between parents and the PR team was an effective form of promotion in inviting the public to send their sons and daughters to school at SMK Muhammadiyah 3 Yogyakarta. With a neuroscience approach in the psychosocial aspect, the team provided a stimulus in the form of motivation, and prospective new students and their parents responded positively. This can add to the public's attraction to SMK Muhammadiyah 3 Yogyakarta. Accepting new students at SMK Muhammadiyah 3 Yogyakarta during the COVID-19 pandemic was carried out online and offline. Online, the process is done through the website. While offline, the process is carried out face-toface while still paying attention to health protocols. Parents and prospective new students can meet the PPDB committee directly to carry out the registration process or seek information about the school.

The number of new prospective students at SMK Muhammadiyah 3 Yogyakarta in 2021 during the COVID-19 period can be seen in Table 1. Usually, the majors most in-demand by prospective students are Modeling Design and Building Information majors and light vehicle engineering. However, this year, the Computer and Network Engineering major accepts the most students from any other major (Ketua Panitian PPDB, 2021).

No	Courses	Amount		— Total
		Male	Female	- Total
1	Modeling Design and Building Information	40	10	50
2	Automated Light Vehicle Engineering	50	0	50
3	Motorcycle Engineering and Business	35	0	35
4	Computer and Network Engineering	50	10	60
5	Electrical Power Installation Engineering	20	0	20
6	Audio Video Techniques	20	5	25
7	Mechanical Engineering	40	0	40
8	Pharmacy	3	30	33

Table 1. Number of New Students at SMK Muhammadiyah 3 Yogyakarta

DISCUSSION

Indonesia is still struggling during the COVID-19 pandemic, the spread of which is increasing day by day (N S Jannana & Amini, 2021). This pandemic also impacts the world of education (Nora Saiva Jannana, 2021). The teaching and learning process starts from home, online or offline ways. The online form means connecting to a computer network (Patma et al., 2021) or showing a connected state (Syaefudin et al., 2021).

Likewise, implementing the new student admission program is also carried out online, so schools must carry out creative promotional strategies. A school zoning system makes the competition between schools in obtaining new



students even higher during this pandemic (Makin, 2018). Therefore, SMK Muhammadiyah 3 Yogyakarta continues to improve its creativity in conducting promotions in 2021. The promotion model used by the school is a promotion model with a neuroscience approach in psychosocial aspects. The concept of this promotion can be seen in Figure 4.

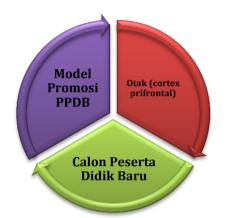


Figure 4. 3 Dimensional Concept of Neuroscience Promotion Model.

The promotion model for new student admissions with a neuroscience approach cannot be separated from the conventional promotion model (Wardoyo et al., 2021). However, the neuroscience model approach focuses more on the right brain and left brain approaches (Novossiolova et al., 2021). They were even refined with the term three-dimensional brain (Pesenti et al., 2021) so that the brain becomes the focus of PPDB's performance and promotion strategy. The neuroscience promotion model motivates and encourages prospective students (Mayberry et al., 2017), especially for those affected by the COVID-19 pandemic. This means not only prioritizing the target or target of prospective students, but also prioritizing the motivation and enthusiasm for learning of students and parents.

The Public Relations team conducted direct observations with prospective students, conducted interviews, and provided alternative solutions to the problems faced by these prospective students. The alternatives include reducing school fees, supporting parents, and encouraging prospective new students. The stages taken by the PPDB Public Relations Team of SMK Muhammadiyah 3 Yogyakarta in conducting school promotions can be seen in Chart 1. The description of the scenes is as follows.

- 1. The Deputy Head of Public Relations of SMK Muhammadiyah 3 Yogyakarta created a Presenter Team, Brochure Team, Poster Team, Banner Team, and Rontex Team. It made groups for each of the teams.
- 2. The promotion strategy is carried out first to SMP/MTs that have collaborated, as evidenced by the signing of the MoU.
- 3. Create a new student admissions website, so that prospective students can easily access and register at SMK Muhammadiyah 3 Yogyakarta.
- 4. Make a presentation schedule either online or offline according to the program in SMP/MTS.
- 5. The team directed promotions by taking a neuroscience approach to attract the sympathy of new students.
- 6. Give motivation and a sense of optimism, not just looking for students, but the priority is to provide learning motivation for prospective new students.
- 7. Motivate new students' parents so that their children stay in school even during the COVID-19 pandemic.
- 8. Provide relief from school fees, starting from uniform fees, building fees, and monthly donations.

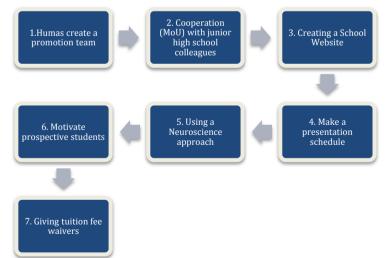


Chart 1. The flow of PPDB Promotion Steps Based on Neuroscience



CONCLUSION

The promotion model for new student admissions with a neuroscience approach is a new student admission management solution during the COVID-19 pandemic in finding prospective students and attracting students to become disciplined and competent students at school. SMK Muhammadiyah 3 Yogyakarta conducts promotions online and offline through the Public Relations Team. Advertising through a neuroscience approach is carried out by providing a positive stimulus in the form of motivation, enthusiasm for learning to prospective students, and the advantages of the school. The stimulus will activate their cognitive and affective domains so that the stimulus will be responded positively. Thus, the promotion model with a neuroscience approach can make it easier for schools to recruit prospective students.

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