The International Journal of Indian Psychology
ISSN 2348-5396 (e) | ISSN: 2349-3429 (p)
Volume 7, Issue 4, DIP: 18.01.053/20190704
DOI: 10.25215/0704.053
http://www.ijip.in | October- December, 2019

The International Journal of INDIAN PSYCHOLOGY

Research Paper

Behavioral activation to increase activity in schizophrenia

Elis Suci Prapita Sari Abdullah[1*], Rizki Wira Paramita[2], Susanti Prasetyaningrum[3], Latipun[4]

ABSTRACT

The subject is a 31-year-old male, he experienced various stressors from his family and the surrounding environment that put great stress on his life. Based on the results of the assessment using interviews, observations, graphic tests (BAUM & HTP), WWQ, WAIS, and SSCT, subjects were diagnosed with schizophrenia with problems of lack of interest in activities that resulted in the persistence of schizophrenia positive symptoms in the subject. The intervention aims to activate the subject's behavior so that he can avoid unpleasant situations and reduce the appearance of depressive effects experienced by the subject through behavioral activation techniques. The results of the intervention showed that the subject was able to carry out daily activities regularly, such as bathing, eating, taking medication, homework such as sweeping and washing clothes, as well as other additional activities in the form of talking with family, neighbors, and playing the guitar. This gave rise to a pleasant mood in the subject because he already felt able to do the activity.

Keywords: *Behavioral Activation, Activity, and Schizophrenia*

Schizophrenia is a very severe psychological disorder. This disorder is most related to popular views about crazy or mentally ill. This often causes fear, misunderstanding, and punishment, even though what is needed by the sufferer is sympathy and empathy from the surrounding environment. Schizophrenia is characterized by delusions, hallucinations, illogical thoughts, incoherent speech, and strange behavior (Nevid et al, 2005).

The prevalence of schizophrenia disorders is less than 1%, where men tend to have a slightly higher risk of developing schizophrenia compared to women (APA, 2013). Men with schizophrenia appear different from women who experience this disorder in several ways, such as men having onset at a younger age, having worse adjustment rates before showing signs of the disorder, having more cognitive impairment, deficits behavior, and worse reactions to drug therapy compared to women with schizophrenia (Nevid et al, 2005).

[1]Psychology Postgraduate Program, Muhammadiyah Malang University, Indonesia
[2]Psychology Postgraduate Program, Muhammadiyah Malang University, Indonesia
[3]Lecturer of Muhammadiyah Malang University, Malang, East Java, Indonesia
[4]Lecturer of Muhammadiyah Malang University, Malang, East Java, Indonesia
*Responding Author

Received: November 4, 2019; Revision Received: December 18, 2019; Accepted: December 25, 2019

© 2019, E S P S Abdullah, R W Paramita, S Prasetyaningrum & Latipun; licensee IJIP. This is an Open Access Research distributed under the terms of the Creative Commons Attribution License (www.creativecommons.org/licenses/by/2.0), which permits unrestricted use, distribution, and reproduction in any Medium, provided the original work is properly cited.

Schizophrenia touches every aspect of the lives of the people affected. Halgin & Withbourne (2011) explained that many people with schizophrenia also have negative symptoms (negative symptoms) which include decreased behavioral functions that are considered normal. The most common negative symptoms are affective flattening, alogia, and avolition (Mairs, 2011). In affective flattening, individuals appear unresponsive to minimal body language, facial reactions, and eye contact. Alogia is loss of words or lack of spontaneity or sensitivity in speech. Avolition includes lack of initiative and unwillingness to act, such as preferring to be quiet and daydreaming than doing anything (Halgin & Withbourne, 2011). Based on these descriptions, the subject has a more prominent negative symptom, namely avolition. This is shown by the subject's behavior who prefers to be alone, daydream, less interacting with others, and unwillingness to do daily activities.

The subject was 31 years old and was not married. The subject was taken to the Hospital in August 2018 to be treated and was the first time the subject was diagnosed with schizophrenia. Subjects treated with the main complaint felt frightened by hearing a threatening sound, terrorizing, and willing to shoot him, thus making the subject nervous and unable to sleep. Before being taken to the Hospital, subjects experienced fear for 8 consecutive days. The family considers that the fear experienced by the subject is beyond normal limits, so the subject is taken to the Hospital.

During hospitalization, subjects showed symptoms such as silence, depressive affect, lack of enthusiasm in activities, being alone, often sleeping on the floor, and showing unnatural affect such as smiling when telling about his fear. In addition, the subject spoke very slowly, often telling hallucinations and delusions repeatedly, but the reality contact was still quite good as indicated by the subject's ability to make two-way communication with others even with repeated topics.

Subject grew up from less warm families, where the mother of the subject often gave advice to her children with a high-pitched or angry tone of voice, including the subject, as well as quite a lot in organizing and determining the subject's life. Unlike the subject fathers who are warm and educate their children in a democratic, decisive, and wise way that is tailored to the character of each child. This shows that there is an imbalance of parenting patterns applied by the father and mother of the subject. When referring to Baumrind's theory (Santrock, 2012), the adoption of parenting patterns by the mother of the subject is authoritarian parenting, while the father applies authoritative parenting style so this is what forms an unhealthy personality in the subject.

In the subject's life, parenting style applied to the subject's mother is more dominant so that the subject often does not feel happy, afraid, anxious when comparing himself to others, and has no initiative (Santrock, 2012). The subject was also considered less independent in determining his choices because the mother of the subject had quite a lot of roles in organizing and determining the subject's life. This is supported by the results of graphic tests that show that the subject has a dependency on his mother, so it is less independent in making decisions and facing problems. Mothers who tend to direct make the subject feel they have no power in making their own choices, plus their siblings who judge the subject as weak and unable to live life as well as they do. This is consistent with the results of the SSCT test that the subject thinks of his parents and siblings who do not care about him.

Weschler Adult Intelligence Scale (WAIS) test results show that the subject has an IQ of 70 (Borderline), where subject have weaknesses in analyzing information and processing it

comprehensively, are unaware of things related to everyday reality and are less able to adjust to social norms. Subjects have obstacles in assessing essential things in their lives, have low motivation in doing things and are very dependent on others to make decisions and determine actions in dealing with things that are complex. However, the subject is still able to think and act in carrying out light responsibilities in concrete situations and simple tasks.

Woodworth's Questionnaire (WWQ) test results can be seen that there are many pathological symptoms that trigger the emergence of problems in the subject. Of the 8 (eight) aspects of this test, 5 (five) of them indicate susceptibility to neurotic disorders. Subject has difficulty feeling or expressing their feelings, experience anxiety of thoughts that always arise and produce tension, experience difficulties in making contact with the surrounding environment, preferring to isolate themselves and shut down. The subject also has excessive suspicion accompanied by feelings of being chased, emotional instability, and uncontrolled behavior. However, the subject is still able to be directed and listen to advice from people he trusts.

Based on the description of the journey of significant events experienced by the subject shows that the subject experienced several stressors that triggered the occurrence of schizophrenia, but the stressor was not the only causative factor. The other factors that also influence are genetic factors and subject personality. The subject has genetic vulnerability that comes from his father's lineage who has experienced the same symptoms as the subject. In addition, subject who have a quiet personality, are closed, are easily anxious, have inferior feelings, and are less able to make decisions and solve problems making the subject easily depressed and have difficulty determining attitude when facing a problem.

The dynamics of the formation of schizophrenic disorders in the subject can be explained through the stress diathesis model. The stress diathesis model views schizophrenia as an interaction or combination of diathesis in the form of genetic or psychological predisposition for the development of psychological disorders, as well as how certain individual life experiences also influence the susceptibility conditions in the disorder (Halgin & Withbourne, 2010). People who have a diathesis for certain disorders, such as schizophrenia, will be free of the disorder or will only develop the disorder at a mild level if the stress level in their lives remains low, or if they develop an effective coping response to deal with the stress they feel.

Diathesis is usually genetic, for example having certain genetic variants that increase the risk of developing certain disorders. However, diathesis can also be sourced from personalities that cause psychological vulnerabilities that can trigger the appearance of disorders (Nevid, 2014). As happened to the subject that has a genetic history of a father having a mental disorder, then a psychological diathesis in the form of a closed and quiet personality, lack of ability to survive in a depressive condition, and a stressful environment is the cause of schizophrenia as experienced by the subject.

Subject has been hospitalized for about 1 month and it was stated that conditions improved so they could return home. The problem that occurs is the lack of understanding of the subject's family in responding to the subject's condition such as providing proper care and response to the subject being a factor that supports the subject's vulnerability to relapse. The subject revealed that when finished undergoing treatment in the hospital and returned home, the activities to be carried out were sitting and sleeping. This indicates that the subject does not want to do the activity because he considers himself unable to do anything, coupled with the response of parents who tend to let the subject with the behavior.

Frester explained that the condition of individuals who withdraw can result in their inability to produce positive reinforcement or reward because they do not do enough productive activities (Putranto, 2016). This happens to subjects who tend to withdraw so that it can inhibit the emergence of expected behavior and cannot get something pleasant. One treatment that can be applied to overcome the negative symptoms associated with psychosis is the use of behavioral activation (Mairs et al, 2011). Kanter et al. (2008) explain that behavioral activation maintains a basic emphasis on behavioral activation strategies and skills training to increase individual contact with pleasant things.

METHODOLOGY

The assessment is carried out for the diagnosis through a series of methods including observation, interviews and psychological tests (WAIS, graphics, SSCT, WWQ). Observations were made to find out symptoms that appear on the subject, such as the behavior and activities of the subject while in hospital. Interviews were conducted on the subject and the mother of the subject to obtain more in-depth information about the history of pain experienced by the subject.

The intelligence test uses the Weschler Adult Intelligence Scale (WAIS) to determine the intellectual capacity of the subject, the ability of the subject to adapt in the social environment, and how the subject makes decisions. Graphical tests are used to find out the personality and psychological vulnerability of the subject. SSCT is used to see problems that arise in the subject from various components of life. Clinical tests use the Woodworth's Questionnaire (WWQ) to determine the presence of neurotic tendencies in the subject.

INTERVENTION

The intervention uses behavioral activation therapy which is a psychological intervention technique that involves physical activity. Behavioral activation is a therapeutic technique that focuses on behavioral therapy that is used to overcome cases of depression and schizophrenia by providing positive activation and reinforcement by increasing activity and seeking rewards to strengthen desirable behavior (Kanter, Busch, & Rusch, 2009; Martell, Dimidjian, & Herman-Dunn, 2010). In implementing behavioral activation, research states that individuals will be activated to get out of bed, leave home, go to work, and interact socially when feeling sad, tired, worthless, uncaring, and hopeless (Kanter, et al., 2008).

This technique was developed from Skinner's theory which emphasizes the basic behavioral approach, that behavior is formed by reinforcement and punishment, which are better known in the operant conditioning approach. When a stable source of positive reinforcement is lost, negative symptoms will occur (Jayati & Hadjan, 2015). Behavioral activation is done so that the subject can get used to doing simple activities and not just staying at home. Through a schedule that is based on the behavioristic principle, the subject faces how the symptoms are in him and will make an effort not to be re-treated in the hospital by arranging a daily schedule and activities that can support the subject in reducing symptoms, negative symptoms and being able to interact with surrounding environment.

The behavioral activation procedure that is applied to the subject through 8 sessions within 30-60 minutes for each session (Putranto, 2016), as follows:

Session 1: Employment contracts and introduction to therapy

The therapist introduces one of the therapeutic processes that can help the subject to avoid the unpleasant symptoms felt so far, the subject is also told what to do such as not being alone in

the room, helping mothers in their activities, and doing simple activities that can be done the subject. The therapist also explains the benefits to be obtained if the subject wants to carry out activities as requested by the therapist, such as reducing sleepiness, body condition fresher, avoiding daydreaming activities, and others.

The response shown by the subject to the explanation by the therapist is that the subject looks less enthusiastic in doing what is requested by the therapist, because he feels unable to move on the grounds that the physical condition is not strong enough to carry out any activity. However, the therapist along with the subject's mother continues to reassure the subject that she is capable and asks the subject to try to carry out activities according to her ability in the next few days.

Session 2: Build commitment

The therapist reaffirms the subject's willingness to participate in implementing the program during the intervention. The therapist continues to encourage and provide support that the subject is able to move if he wants to try and try it. The therapist also reveals to the subject that the fears that he often experiences will continue to emerge if the subject spends time just staying in the room. The therapist invites the subject to show changes so that parents and family also feel happy and the subject will no longer be taken back to the hospital to be treated.

When this session took place, the mother and sister of the subject were involved to provide support to the subject to move while at home. The subject seemed happy when getting praise from her mother and sister, as well as the therapist also praised the subject and encouraged the subject to return to do activities that had previously been done. The subject seemed to lack confidence when returning to activities that had been carried out before with the subject's current condition. That way, the subject wants to try to do simple activities that are able to do while at home.

Session 3: Activity scheduling I

The therapist asks the subject to design a daily activity schedule that makes the subject interested and able to do in the form of self-report sheets. In the implementation of designing a schedule, the therapist helps the subject to determine the activities the subject wants to do from morning to night. The therapist also communicates to the mother of the subject in order to control the activities that have been agreed with the subject. The therapist together with the subject makes a list of activities and chooses them according to the ability of the subject to perform the activity.

The subject is willing to try to do the activities agreed with the therapist. However, subjects do not want to write their own activities to be carried out, so the therapist writes and the subject dictates. Activities planned will be carried out within the next 3 days. The results of this session are the therapist and the subject manages to make a list of activities to be carried out by the subject written on the self-report sheet. The activities that will be carried out by the subject are cleaning the bed, eating, bathing, taking medicine, going for walks morning and evening, doing homework (such as sweeping, washing clothes), and praying.

Session 4: Activity monitoring I

In this session, there are several things done by the therapist that is the therapist checks the activities that have been done by the subject by checking the self-report sheet that is filled in by the mother of the subject in accordance with the activities that have been done by the

subject. Then the therapist also ensures whether or not there are activities that are considered less effective to be carried out by the subject. Next, the therapist confirms the subject's mother in relation to the subject's achievement in carrying out pre-planned activities.

The results of this session are that there are some activities that the subject is still unable to do regularly, namely prayer, cleaning the bed, and morning / evening walks. While the activities that are quite routinely carried out the subject for 3 days before are bath, eat, taking medicine, and doing homework (such as sweeping). Thus, in this session the therapist looks at the extent of the subject's ability to carry out planned activities. So that these activities will be selected to later be used as activities that need to be done repeatedly by the subject until he is familiar with these activities.

Session 5: Identification of feelings and rewards

The therapist identifies the feelings of the subject during the activities that have been previously scheduled by asking the subject about what he feels after doing the activities that he has done. Then the therapist also ensures that the activities carried out by the subject are able to be carried out. In addition, the therapist together with the subject and his mother plan for a reward that will be obtained by the subject after successfully carrying out targeted activities.

The subject revealed that he was happy because he could carry out activities that had been planned, although not all activities could be done by the subject. The subject also sometimes still complained about him who was often sleepy, but acknowledged that the activities carried out were able to reduce his sleepiness. Therefore, the therapist will rearrange the activities carried out by the subject for the following days according to the results of the activities that have been done before.

The results of the discussion about the reward that will be given to the subject is when the subject is able to carry out planned activities, the subject will get a reward in the form of praise, the mother will cook the subject's favorite food, and the subject will buy the object she likes.

Session 6: Activity scheduling II

The therapist and the subject redesign the daily activities that the subject will do again. The next activities are arranged based on the results of the previous session and are written on the self-report sheet, where the activities will be carried out for a longer period than before. The therapist also communicates the results of scheduling the activities that will be carried out by the subject to the subject's mother in order to control the subject's activities and provide rewards that were agreed upon in the previous session.

Subjects want to write their own activities that will be carried out for the next week. In this session, the therapist and the subject succeed in making a list of activities to be carried out and the subject writes their activities on a self-report sheet. Activities that will be carried out by the subject consist of compulsory activities in the form of prayer, bathing, eating, taking medicine, and doing homework (such as sweeping and washing clothes). Then there are accompanying activities in the form of morning walks, talking with relatives and mothers, talking with neighbors, reading books, and playing the guitar.

Session 7: Activity monitoring II
In this session, the therapist checks and evaluates the activities that have been carried out by the subject by checking the self-report sheet that has been filled in by the subject's mother. The therapist asked how the subject felt after 1 week doing the activities that had been planned and asked the mother about how the subject developed in carrying out her activities at home.

The description of the subject's condition at the time of this session is that it looks more cheerful and vibrant, unlike before which looks lethargic and sleepy. The subject claimed to be happy because it turned out that he could do these activities and have an impact on a fresher body condition, and could fight the drowsiness that was affected by the drugs consumed by the subject. The subject's mother also explained about the development seen in the subject, where the subject was more enthusiastic about doing activities, being alone and daydreaming was reduced.

The results of activities that have been carried out by the subject are the regularity of the frequency by the subject in compulsory activities such as bathing, eating, taking medicine, and homework. However, prayer activities do not want to be done by the subject because he feels the activity is still heavy to do. Then the subject also occasionally performs accompanying activities in the form of talking with siblings and mothers, talking with neighbors, and playing the guitar.

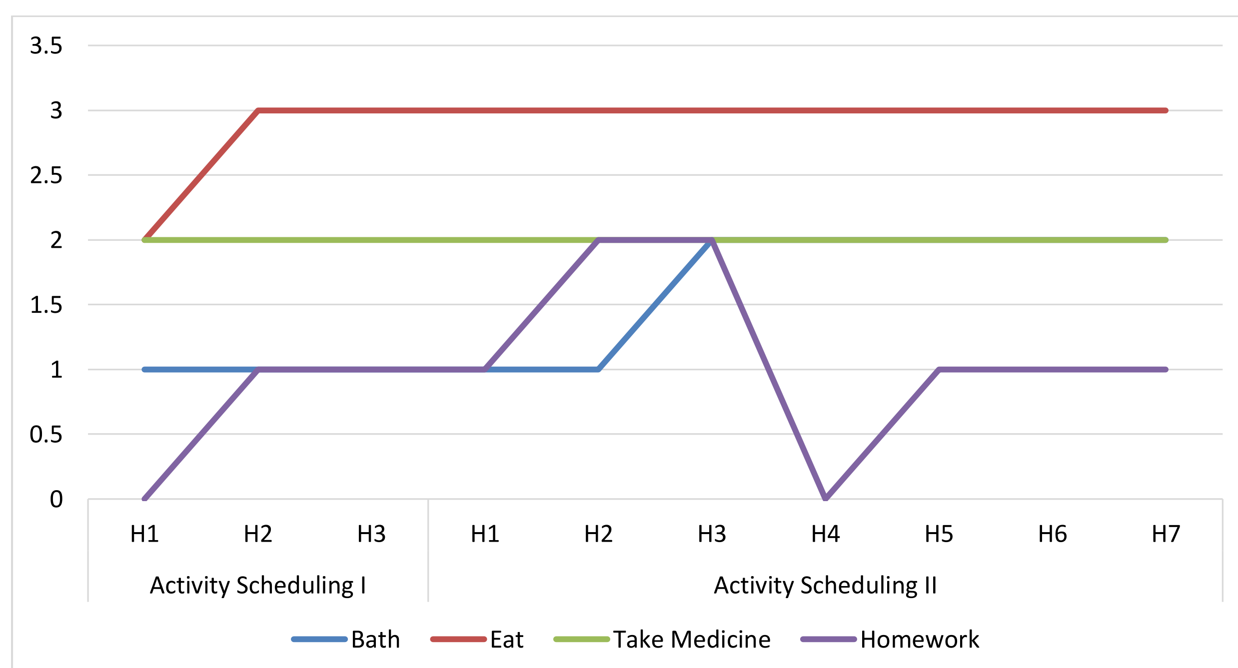
Session 8: Evaluation and termination
The therapist evaluates and discusses changes in the activities of the subject as a whole by checking the self-report sheet, providing feedback on the subject's performance during program implementation during the intervention, and ending the program and providing motivation for the subject so that he continues to carry out daily activities with regular.

The evaluation results show that the subject was able to carry out daily activities that had been planned with the therapist compared to the conditions before the intervention. The subject felt happy with the activities carried out because it can make the body fresher and daydreaming activities that are usually done to be reduced. The subject was also happy because he felt more attention from his mother and siblings. The subject wants to continue to do these activities and will be controlled by the mother of the subject.

RESULTS

The results of the comparison before and after the intervention are evaluated based on the increase and regularity of the daily activities of the subjects in the self-report filled out by the subject's mother. The activities carried out by the subject are based on the joint planning of the therapist written in a self-report sheet, where the activity is made based on the subject's willingness and ability to do so that the subject can maintain commitment in carrying out these activities.

The results are considered optimal if the subject is able to carry out these activities regularly and consistently, but this is not easy for subjects who previously did not want to move. However, the target determined in the intervention is to increase daily activities carried out by the subject. Thus, the regularity of activities carried out in stages in accordance with what was filled in the self-report sheet was assessed as a very significant progress in the intervention process. The results of the intervention to see the improvement and regularity of subjects in conducting activities at home can be seen in graph 1.



Graph 1. Behavioral Activation Intervention Results
Note: H1 - H7 = Day 1 to Day 7
Number 0-3.5 = Frequency of activity

Based on the graphic above, the results are obtained that the subject has the will to move and experience irregularity gradually. The activities carried out by the subject are bathing, eating, taking medicine, and homework (such as sweeping and washing clothes). The activity of taking medication is done 2 times a day and the subject is able to regularly do it from the first day after hospitalization onwards, this happens because the subject's family is always reminded and also sometimes the subject has his own initiative to take medicine. Likewise with eating activities that are also regularly carried out by the subject from the second day of the intervention to so on 3 times a day. However, bathing activities that should be done 2 times a day are only done once in the first 5 days of the intervention and increase to 2 times a day from the 6th day onwards.

The activities that are considered quite difficult to be carried out regularly by the subject are doing homework such as sweeping and washing clothes. This happens because the activity to do homework is done according to certain situations. In addition to activities that are mandatory for the subject in accordance with the target of the intervention, the subject also sometimes performs other activities such as talking with relatives and mothers, talking with neighbors, and playing guitar which is the subject's hobby. However, these activities are only additional activities outside the activities that should be carried out subject according to the agreement specified in the intervention process. At the time and after doing the activity, the subject acknowledged that he felt a change in the emotional side of the emergence of feelings of pleasure because he realized that he was able to carry out these activities.

Before the intervention, the subject did not have the will to do the activity. The subject considers that he is incapable and difficult to carry out activities, so he spends more of his time alone and daydreaming in his room. The subject also admitted that he was often sleepy and chose to spend his time sleeping through the day. Then the mother and sibling subjects

who support and strengthen that the subject is indeed unable to carry out activities that require energy, so leave the subject with these conditions.

After the intervention, the subjects started doing activities regularly even though the activities carried out were still simple and carried out at home. He also looks more cheerful and very rarely complains about sleepiness that he usually talks about. In addition, a change in family response, especially the mother and sibling of the subject also supports the progress of the subject. They have understood that when the subject's lazy behavior is left as before, it will actually result in the appearance of the symptoms of schizophrenia experienced by the subject. That way, the therapist assesses that the subject is actually able to move, but so far he has received less encouragement and appreciation from his family and lack of confidence in the abilities he has.

DISCUSSION

The activities written on the self-report sheet have been adapted to the abilities and interests of the subject, but of course it is not easy for schizophrenic patients to implement all activities on a regular basis. Therefore, the role of the family in providing direction and encouragement for the subject becomes one of the important factors in achieving the intervention targets. The results of the study explained that family cohesiveness to support each other in handling family members suffering from schizophrenia correlated with emotional well-being of patients and families (Weisman et al., 2005). That way, the family needs to understand and want to be involved in the intervention process after being given information about the importance of regular drug consumption for the subject and family cohesiveness to support the recovery of the subject while at home.

In the implementation of the program, the subject showed a significant development and there was a change in the emotional side of the emergence of feelings of pleasure after being able to carry out activities that have been scheduled. This shows that the subject has been able to reduce the negative symptoms of avolition in the form of silence, daydream, and unwillingness to do activities. This is in accordance with the behavioral activation approach which is expected to be able to work from the outside into the subject by arranging activity schedules and using gradual assignments to increase the patient's opportunity to have a pleasant experience (Putranto, 2016). Therefore, the subject is committed to carrying out activities that have been arranged with the therapist, supported by motivational encouragement from parents and family.

Behavioral activation also provides positive changes to the daily activities of the subject due to the determination of behavioral targets or activities realistically and the existence of reinforcement in the form of rewards given by the mother and family of the subject when the expected behavior arises. The existence of reinforcement obtained from the mother makes the subject tend to repeat his behavior. Strengthening is given in the form of praise, cooking food that is liked, and buy the items desired by the subject. In addition, the feeling of pleasure that arises in the subject also reinforces the emergence of behavior because the subject realizes that he is actually capable of carrying out these activities. This is supported by Skinner's theory that the formation of behavior depends on the consequences that follow the behavior and the individual tends to maintain a behavior if there are pleasant consequences for him for the behavior (Olson & Hergenhahn, 2011). A large number of studies also support the basic principle of reinforcement which states that behavior will increase when followed by certain environmental changes (Kanter et al., 2008).

With the regularity and consistency of the subject in carrying out activities, this means that the subject's opportunity to remain silent, daydreaming, and other maladaptive behaviors is reduced. The subject also began to be open to share the results of his thoughts and feelings with his mother and sister, and they also knew how to respond when subjects thought "strange" things. Changes in behavior on the subject also provide a new understanding that by doing activities that are useful, he thinks he is capable and more empowered in living his life. The condition of the subject who is starting to be active in activities makes the therapist hope that the subject is able to increase his activities outside the home, such as starting work so that his quality of life is better.

REFERENCES

Alwisol. (2009). Psikologi kepribadian edisi revisi. Malang: UMM Press.

American Psychiatric Association. (2013). Diagnostic and statistial manual (5th ed.) Washington, DC: American Psychiatric Publishing.

Boeree, G. C. (2009). Personality theories. Jogjakarta: Prismashopie.

Halgin, R.P., & Withbourne, S.K. (2011). Psikologi abnormal: Perspektif klinis pada gangguan psikologis. Jakarta: Salemba Humanika.

Jayati, I. S., & Hadjan, N. R. (2015). Tata laksana behavioral activation untuk menurunkan tingkat depresi pada pasien stroke. Gadjah Mada Journal of Proffesional Psychology, volume 1 (2) halaman 77-88.

Kanter, J. W., Busch, A. M., & Rusch, L. C. (2009). Behavioral activation: distinctive features. New York: Routledge.

Kanter, J.W., Manos, R.C., Busch, A.M., & Rusch. L.C. (2008). Making behavioral activation more behavioral. Behavioral modification, volume 32 (6) halaman 780-803.

Mairal, J. B. (2011). Behavioral Activation Intervention in A Patient with Depressive Symptomatology. Psychology in Spain, nomor 1, volume 15, page 22-32.

Mairs, H., Lovell, K., Campbell, M., & Keeley, P. (2011). Development and pilot investigation of behavioral activation for negative symptoms. Behavior Modification, 35 (5), 486-506

Martell, C. R., Dimidjian, S., & Herman-Dunn, R. (2010). Behavioral activation for depression: A clinician's guide. New York: Guilford Press.

Nevid, J.S., Rathus, S.A., & Greene, B. (2005). Psikologi abnormal. Jakarta: Erlangga.

Olson, M.H., & Hergenhahn, B.R. (2011). Pengantar teori-teori kepribadian (Edisi ke-8). Yogyakarta: Pustaka Pelajar.

Putranto, A.K. (2016). Aplikasi cognitive behavior dan behavior activation dalam intervensi klinis. Jakarta Selatan: Grafindo Books Media.

Santrock, J. W. (2012). Life-span development edisi ketigabelas. Jakarta: Erlangga.

Weismann, A.G., Rosales. G., Kymalainen, J., & Armesto, J. (2005). Ethnicity, family cohesion, religiosity and general emotional distress in patients with schizophrenia and their relatives. Journal of Nervous and Mental Disease, 193, 359-368

Acknowledgements

Special thanks to my parents who always support me in everything. Thanks for my lecturers and supervisors who have guided and provided support for us. Also my client and his family at Surabaya City that trust me for help them.

Conflict of Interest

The author declared no conflict of interests.

How to cite this article: E S P S Abdullah, R W Paramita, S Prasetyaningrum & Latipun (2019). Behavioral activation to increase activity in schizophrenia. *International Journal of Indian Psychology*, *7*(4), 442-451. DIP:18.01.053/20190704, DOI:10.25215/0704.053