Analysis of the Effect of DJ Transition Techniques on Discotheque Visitor Behavior: A Case Study of Entrainment at Panic Paradise Club

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ABSTRACT

The phenomenon of trance that occurs when watching music performances, especially traditional music in Indonesia, is common and is often associated with the supernatural, beliefs, and other mystical aspects. However, scientific research has provided an explanation for this phenomenon. Entrainment, a condition in which the body of a living being is synchronized with the music's emitting source (oscillator), is the scientific explanation for the phenomenon. This research focuses on how music in nightspots (discos) can make listeners reach the entrainment phase. The entrainment phase can be achieved if the beat of the music is stable when perceived by the listener. The researcher hypothesized that music transition techniques are very influential to achieve the entrainment phase. In addition, the individual and collective behavior of participants can influence other discotheque visitors. This research uses a qualitative method with a grounded theory approach. Data were collected through field observations with a number of participants in two trials. The first test (pre-test) was conducted with music from a disc jockey who was less proficient in transition techniques, while the second test (post-test) was conducted under the opposite conditions. The results showed that the participants were able to achieve the third phase of entrainment and affect other visitors collectively, which was not the case in the pre-test. This shows that entrainment can be achieved with effective music transition techniques from a disc jockey, and an individual's entrainment state can influence other discotheque patrons both individually and collectively. The successfully achieved entrainment phenomenon is also able to explain the phenomenon of trance influenced by music.

Keywords: Musical Trance, Entrainment, Disc Jockey, Transition Technique, Discotheque

INTRODUCTION

The discourse on entrainment theory in the context of music (biomusicology) has only been discussed in the world since at least the early 2000s. Previously, the concept had been discussed in the context of physics, meteorology and biology. Theoretically, entrainment is used to explain and study the rhythmic synchronization between an oscillator (sound transmitter) and an oscillator (sound wave or beam receiver) (Clayton, 2012).

In Indonesia, the concept of entrainment has not been widely discussed. Thus, explanations of music-influenced "trance" events such as in some traditional music performances are still associated with things that smell cliché, abstract, occult, and mystical. In this article, the author tries to investigate and test entrainment theory with the research subjects of discotheque visitors.

Discotheque visitors gradually and slowly enter the entrainment phase. The author's initial assumption is that the use of

transition techniques by a disc jockey will accelerate this entrainment process.

The entrainment framework can generally be described as music as a rhythmic input, synchronized with the music in the body (biorhythm) of the listener, and sending suggestions and stimuli that will later be integrated in the motor control system in the human brain (Philips Silver, et al, 2010). That is what makes the stream of unconsciousness (stream of unconsicionus) move the human body without realizing or planning. This condition is referred to as late-stage entrainment, which is often found in the case of traditional Indonesian music performances. In this paper, the author refers to this situation as "music trance".

Music is present as a stimulus, while other factors such as room conditions, temperature, beliefs, and so on from an individual will be supporting factors for the achievement of the entrainment phenomenon. Clayton, Sager, and Will (2005) argue that the most influential part of music to create entrainment is the pulse rate that is synchronized with the pulse rate in the human body as a biorhythm.

Research conducted by Gutierrez-Blasco (2012) involving 70 respondents, proved that entrainment can also occur in music without a beat (ametrical). However, entrainment that can occur without a steady pulse can only be aimed at people who are often associated with music. It is related to the empirical and aesthetic experience of the viewer. It proves that external and internal influences when a person perceives music, will contribute to the achievement of the entrainment phenomenon. This is due to the musician's ability to extract auditive information, supported by the individual's a priori experience (Koelsch, et al, 1999). As for this study, the active participants were the dancers. To see the overall behavior of discotheque visitors, the author calls them passive participants, a heterogeneous collection of individuals. Therefore, the author assumes that the phenomenon of entrainment in the discotheque space can only occur if the music as (rhythmic input) can only affect the body of the individual listener (motor output) when the music is in a stable condition. Stable means that the tempo, beat, and phrase are maintained from one song to another without being interrupted.

Participants in this study were informed that they were in the process of research. However, no further notice was given. Only the direction to keep dancing to the music, especially the beat. Based on this, the author only conducted the study twice to compare the use of transition techniques in influencing the achievement of the entrainment phenomenon. This is because, based on Clayton's theory, entrainment can only be achieved if the music is synchronized with the listener. The condition for synchronization is the process of perceiving music and physiological responses from participants constantly (not stopped). The purpose of the transition technique is to allow the listener to perceive the music constantly without pausing.

Neuroscience studies prove that the motor system in the human brain is implicated in auditive and visual perception (Chen, et al, 2008). However, it is important to note that the music as a whole (not just the beat and pulse) captures the listener's attention and feelings (Kornysheva, et al, 2010). Most importantly, the interaction between the music and the perceiving individual must be stable, so that the rhythmicity can be synchronized with the listener's motor control system (Thaut, et al, 1999).

Gutierrez-Blasco's research proves that the steady pulse of metrical music, as well as the unsteady pulse of ametrical music

will still be able to make the listener achieve the entrainment phenomenon. The two most important factors are the tempo of the music and the pulse. Music with a slower tempo will be slower to produce a reaction than music with a faster tempo. Music with a steady pulse is relatively quicker to get a response and reaction than the opposite condition as in ametrical music. However, it should be underlined that in the study Gutierrez-Blasco involved musicians, music students, and self-taught musicians. This cannot be done with nightlife patrons who have heterogeneous musical experiences. This is why the process of enjoying music by discotheque-goers should be a continuous experience.

The way to ensure that the experience of perceiving music does not stop, even though there are many songs being played or mixed, is to use transition techniques. Transition technique refers to a disc jockey's ability to move from one song to another song well and smoothly. This ability makes the process of perceiving music run well and stably. According to the author, this condition can enable the synchronization process. The explanation above shows the connection between the transition techniques used by disc jockeys and the entrainment concept studied in discos.

The author divides entrainment into several phases by following the phases or stages of the depth of human sleep from Sigmund Freud's theory (Binswanger, Wittmann, 2019). This is because there are similarities between the sleep phases in the context of human consciousness and the concept of entrainment. There are four phases in sleep before entering the dream phase or rapid eye movement (REM). The pre-REM state is where an individual gradually loses consciousness until they fall asleep. This condition was adapted by the author into the entrainment phase. In general, according to Freud's dream theory, these phases are Alpha, Theta, Spindle, and Delta.

The alpha condition refers to the conscious state of humans with a relaxed body. Theta state refers to the initial state when an individual enters the unconscious phase. Spindle condition is when an individual is still conscious but his body is following orders from the subconscious. Delta state is a phase of complete unconsciousness.

The conditions above when translated into the entrainment phase include the following (Rizal, Wastap, and Saleh, 2024):

- **Basic Synchronisation**: When the individual begins to move to the beat and rhythm of the music consciously. In this state the dancer is still planning the movements

- **Advanced Synchronisation**: The dancer moves to the rhythm and beat freely without planning the movement and only follows the 'command' of his/her body consciously. This condition shows that the music as rhythmic input has begun to synchronise with the dancer's body.

- **Early Entrainment**: this condition is characterised by free, unplanned movements and motor output from the dancer's body following the rhythmic input without being conscious. In this condition the dancer is still conscious, but her body movements are already quite difficult to control. This condition is already in the entrainment category.

- **Extreme Entrainment**: In this condition the dancer has also lost consciousness and only the subconscious follows the rhythmic input. This means that the

rhythmic input has been integrated with the individual's motor control system, so that it can be observed through their motor input. This phase is where musical trance occurs, which is often seen in the case of traditional music performances.

Of the three stages above, the first type of entrainment is personal entrainment. Meanwhile, the other two types are interpersonal entrainment. It can be formulated that personal entrainment is the process of synchronizing music as rhythmic input with music in the body (biorhythms) in the body until carryover occurs. In this case, the music in the human body follows the music coming from outside the body. This causes the motor sensors to move following this synchronization. Meanwhile, the other two types of entrainment are the process of synchronizing movement (motor) between individuals to other individuals (MSE) or one group to another group (CSE).

Motor coordination between individuals is something that is very possible between humans. For example, when two people hold hands and both have a plan to swing the holding hands. Then, the hand swings will be integrated and synchronized. Therefore, the hand swings will occur in the same beat and not against each other. The point is because one person follows the rhythm of another person's movements. This is the basic concept of entrainment.

The entrainment conditions seen from discotheque visitors are evenly divided between phase three and phase four. Several other discotheque visitors reached the fourth phase with the encouragement of other external factors such as alcohol and so on. However, active participants in this research only received stimuli and suggestions from music and the atmosphere of the room. This is to make the research results more contextual. Participants truly perceive music without encouragement or influence from other factors, such as losing consciousness due to drinking, or other things. What we want to prove through this research is that the participants are completely moving because they are carried away by the music beats presented by the DJ.

METHOD

This research was conducted twice to compare the condition of participants when the music presented by the disc jockey was not supported by adequate transition techniques (pre-test), compared to the condition when the music presented had a smooth transition from one song to another (post-test). The research was conducted using natural observation methods and direct observation on six participants. Apart from that, this research was also carried out outside of planned research as previously stated, considering that the author also works as a disc jockey. Live music was chosen in this research, because research conducted by Trost and friends (Trost, Trevor, Fernandez, Steiner, & Frühholz 2024) proves that music presented live (including live DJs) triggers affective brain mechanisms (especially in the amygdala) is more powerful than music listened to online, or indirectly.

The selected participants were dancers who were used to perceiving music as rhythmic input, which became rhythmic output through dance movements. The selection of participants in this category is intended so that participants have the ability to extract auditive information supported by a priori experience so that they can reach the entrainment phase. The experience in question was aimed at ensuring that participants in this study had a stronger emotional connection to music, compared to ordinary people. Because,

musical emotions are the key to how brain responses mechanistically have a direct effect on affective brain circuits (Koelsch, 2014). Observation results are carried out by measuring the duration or time an individual achieves entrainment from phase to phase. As a result, the data will be analyzed to reach logical conclusions.

The method used in this research is a qualitative method with a grounded theory approach. The qualitative method was chosen so that researchers can get to know the subject well, and can feel what the subject feels, and then describe the research results (Basrowi in Fadli, 2021). Apart from that, this research also involves researchers in the context and atmosphere experienced by the participants at the time of the research. The aim of choosing this method is to be able to describe the context experienced according to what happens in the study field (Creswell, 2017). Meanwhile, grounded theory is a method of analysis with systematic procedures aimed at developing theory (Ornam, et all, 2022). In this research, researchers tried to understand the behavior of discotheque visitors by observing and participating. Researchers observed a unique phenomenon when someone entered a transcendental phase caused by music. From this phenomenon, the researcher collected a number of literature and interviews with several disc jockeys, one of whom was DJ Rookie, until finally concluding a hypothesis that the transition technique used by disc jockeys was able to make listeners achieve the entrainment phenomenon. Apart from that, the author also borrowed quantitative methods to calculate the tempo of each song presented by the disc jockey. This design is very appropriate for the research described in this article, because the theoretical testing described by Martin Clayton will be calculated quantitatively based on observations, and explained qualitatively based on analysis (Khairunnisa, 2021).

The stages of using this research model are taking data sources from two sources and two methods at once (Gilbert, 2006). In this research, the source of quantitative data was obtained from calculating the participants' time to reach the entrainment phase. Apart from that, quantitative data sources are also obtained by calculating the middle tempo in the transition region, to ensure the DJ uses the most appropriate tempo in the music transition. Meanwhile, qualitative data sources were obtained from phase to phase analysis of entrainment, as well as analysis of stages from individual entrainment, to synchronization with large groups.

The technique used for data collection is observation techniques. The author will make detailed observations on each participant, to see the synchronization process that can be seen from motor movements and then measure the achievement time. Meanwhile, the author used interview techniques to collect pre-research data. The analysis process was carried out after the data was collected through two studies which were then referred to as research 1 and research 2. Research 1 was where participants perceived music without transition techniques. Meanwhile, research 2 was when participants perceived music from a DJ using transition techniques. Analysis is also carried out on observations from individual entrainment to collective social entrainment.

DISCUSSION

A. Entrainment Case Study and its Relation to Transition Techniques

Research conducted by neuroscientist Patel (2008) shows that the entrainment

process becomes a beat-based rhythmic processing. That is, the process from rhythmic input to motor output is a beat induction process. Patel has conducted tests on an older bird named Snowball and as a result, Snowball's head nodding follows the induction of beats that are regularly played into his ears. Meanwhile, Clayton has conducted the experiment on a sea lion. The result was a synchronisation between the listener's motor skills and the beat of the music. This synchronisation is called the entrainment phenomenon.

The most extreme level of entrainment is losing consciousness, and moving under the influence of the music. This is a transcendental state that occurs due to music and is often found in a number of traditional arts in Indonesia (Irianto, 2022). This condition is different from the process of 'trance' or Possession Trance Disorder (PTD) which belongs to the category of dissociative disorders and mental disorders (Pietkiewicz, Kłosińska, & Tomalski, 2022). Although the similarity is that the conscious mind (memory, self-identity, motor control, and awareness of the surrounding environment) disappears in whole or in part. However, the entrainment process brings the listener to a standstill when the music stops.

When it comes to PTD, there are other factors such as genetics, environment, culture, stress, and traumatic events. Another cause is psychological disorders due to excessive emotionality or in medical terms called hysteria. PTD conditions are also caused by the belief of the sufferer in the existence of spirits, as well as other beliefs. As for entrainment cases, the synchronisation is purely caused by music. Although until now, Clayton is still of the opinion that entrainment only occurs in the human species (homo), although some non-human species have also experienced entrainment. However, successful experiments conducted on seals, parrots and so on prove that other factors (besides music) have no significant effect on this synchronisation process.

The two interrelated variables in this article are transition technique and entrainment. The author sees the link between transition and entrainment techniques in the context of EDM (Electronic Dance Music) music presented by disc jockeys in discotheques as two things that cannot be separated. T.W Adorno (in DeNora, 2004) ensures that the 'mode of consciousness' and 'cognitive habits' of an individual will be greatly affected by music. Adorno gave an example of music such as that made by Schoenberg (Austrian composer born in 1874) being able to foster critical consciousness in a human being. There are also many other examples of works that affect not only the way of thinking, but also the mode of consciousness of a human being. This foundation that allows entrainment to occur in an individual is due to musical factors.

The influence of the transition technique is no less profound. The interaction of music with biological rhythms in the human body is influenced by the synchronisation of pulses. Human biological rhythms come from heart rate, blood circulation, brain waves, and others. In the biological view, the various biological rhythms are already synchronised in the human body. Thus, an individual will feel that his or her heartbeat is in a steady beat with the pulse in his or her veins (Merker, Madison, & Eckerdal, 2009). In conclusion, most research on entrainment is focussed on the idea of temporal prodicity. That means, stability and periodic rhythmic cycles are the main keywords in entrainment. "keberhasilan" entrainment (Gutierrez-Blasco, 2012).

From the explanation above, it can be seen how the periodic cycle and musical entrainment are very closely related. While the transition technique in this context is the way a disc jockey moves from one song to another perfectly. To do this, there are several musical elements that will be seen and calculated in detail, one of which is the beat. The beatmatching process is only one of the main elements in the transition technique used by disc jockeys. However, according to the author, this is what makes the entrainment process possible. The participants in this study did not stop following the music because of the disc jockey's successful transition technique.

It can be concluded that the relationship between entrainment and transition techniques is tempo. A glance can be seen in the following graph:

The chart above is the process of entrainment. In this process, the rhythmic input, namely the music that comes out of the speakers and the audio sound, will be synchronized with the music from within the human body so that it comes out as movement (motor output). There are several things that influence this process to run well, including tempo and transitions. If one music to another stops, the synchronization will also stop. The transition technique is aimed at making the transition from song to song smooth and precise, so that the process of perceiving music does not stop. This transition technique is also the difference between a Disc Jockey and someone who plays songs via cellphone or laptop.

B. Participants Perceiving Music from Disc Jockeys Without Transition Techniques

The first research condition was designed with the researcher observing three participants, all of whom were dancers. All three were asked to deeply perceive the music while a disc jockey (initialised as DJ A) was performing. However, the first disc jockey was a disc jockey who lacked proficiency in performing transition techniques. The author considers that this disc jockey is less skilled in making musical transitions between one song to another. Music transitions require beatmatching techniques, which is harmonising beats from two or more songs (tracks). To harmonise beats from multiple tracks, calculations are required on the beats of the bars and phrases of the tracks (Morse, 2019). For example, when the disc jockey transitions from Avril Lavigne's 'Girlfriend' to Maroon 5's "Payphone" feat. Wiz Khalifa. The first song has a BPM of 75 and the second song has a BPM of 115. The disc jockey's decision was to speed up the song that had a BPM of 75 to 115 BPM. In fact, the best way to transition the two songs is as in the following diagram:

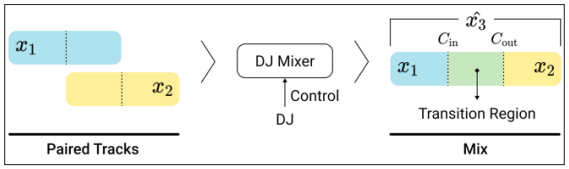

Illustration of the process of making a DJ transition.

(Source: Chen, et al, 2022)

A disc jockey must find the right tempo as a transition region, based on the above chart. The writer will usually use the median formula to find the right number

as the transition region to mix two songs. The following is the tempo calculation for two songs (Girlfriend by Avril Lavigne, and Payphone by Maroon 5 feat. Wiz Khalifa) based on the median formula:

Me = [(n/2) + (n/2) + 1] ÷ 2.
Me = [(190/2) + (190/2) + 1] : 2
Me = 191 : 2
Me = 85.5
Me = 90 (Rounding)
Me = Median
n = Total number (75 + 115)

From the above calculation, there are two options that disc jockeys can choose. Firstly, the BPM of the two selected songs (Girlfriend and Payphone) is changed to 90 BPM, and finally using the trasition region in connecting the two songs to 90 BPM. Of the two options, most disc jockeys use the first method, which is where the song sampled in this study is the song Girlfriend which has a BPM of 75 pulled slowly at BPM 90, then the Payphone song from 115 BPM is lowered to 90 BPM.

C. Participants' Perception of Music from Disc Jockey with Transition Technique

The first and second research conditions were designed under the same conditions, conducted in the same place, and had similar participants (both dancers). However, the disc jockey who performed was DJ Rookie, who is a disc jockey with excellent transition techniques. As evidenced by the suitability of the tempo selection for the first four songs, namely Hungry Ham from AsAp Ferg feat. Skrillex at 70, Stay High by Tove Lo at 140, Make My Love Go by Jay Sean feat. All four songs are set at 105 BPM, so that beatmatching can be done smoothly, and does not really change the perception of the song.

When calculating the median with the same formula as before, the calculation done by DJ Rookie is very precise.

Me= {(n/2)+(n/2)+1}:4
Me= {(410/2)+(410/2)+1}:4
Me=411:4
Me=102.75
Me=105 (rounding)

In EDM music, the tempo of the song will be rounded in multiples of 5. Therefore, the result of the calculation at 102.75 will be rounded to 105. The choice made by DJ Rookie to start the song at 105 proved to make him able to transition between songs smoothly, by involving elements for other transitions effectively. DJ Rookie also performed a number of transitions using fade, cut, single phrase beatmatch, bass swap transition, and filter fade transition with ease, because he had synchronised the beats from the start.

This made the participants less distracted when perceiving music and responding to it with motor output. From the researcher's observation, the participants were able to gradually enter phase by phase of entrainment well and dynamically.

D. Comparison of Research Results

The transition technique is the ability to produce a smooth transition from one song to another, so that the movement between songs becomes imperceptible. It is as if the listener is still listening to the same song, and still enjoying it in the same vibe and mood. These two things produce the same groove and beat, so that the rhythmic output felt by the body remains stable (Butler, 2006). Two songs that have different tempos, such as listening to two songs from one online music player playlist, will give the impression of syncopation.

Syncopation is a rhythm played at the

same time that makes a piece of music or rhythmic input become rhythmic. In this context, two songs played without a transition technique will result in syncopation. Moderate syncopation will make a listener's desire to respond to it into motor output stronger. However, syncopation that feels strong will make the listener tend to stop and stop the motor response (Witek, et al, 2014). The transition technique in this article is intended to make the process of aesthetic perception of a piece of music (auditive) unstoppable. This is what allows participants to reach phase to phase of entrainment.

In the first study, participants perceived music without transition techniques. As a result, there was syncopation between the first music and the second music. Whereas in the second study, participants perceived the music presented by the DJ using transition techniques. The part in the middle between the two songs became a transition region that became a bridge to connect the whole. This is what makes the process of perceiving music non-stop. Thus, participants slowly entered each phase of entrainment. The results of the two studies can be seen in the following table.

Phase	Duration (mean / minutes)	
	1st Research	2nd research
1.	40	25
2.	70	45
3.	Unsuccessful	90
4.	Unsuccessful	125 (only 1 participant)

Table 2.
Comparison of research results.
(Source: Samsul Rizal, 2024).

You can see from the table above the comparison between the two studies. In the first study, participants could only reach the first phase of entrainment after 40 minutes. While the second phase was only reached at the 70th minute. Participants failed to enter the third phase which is the initial entrainment phase. That means, participants failed to enter the entrainment phase, only being in the pre-entrainment phase.

This was in contrast to the second study, where participants on average entered the first phase at the 25th minute or 15 minutes earlier than the first study. About 20 minutes later, or around the 45th minute, the participants successfully entered the second phase of entrainment. The two phases are the pre-entrainment phase. The participants actually entered the entrainment phase (the third phase), at 90 minutes. The researcher saw gradual rhythmic synchronization between one participant and another. One of the participants even entered the final phase of entrainment at 125 minutes.

To compare the results of both quantitatively, researchers try to look at it with a value comparison to find the ratio between the two (Hardi, Hudiono, & Mirza, 2013).

Comparison is the right choice to see and compare values or ratios. Ratio search is the most appropriate way, according to the author, to compare one quantity with another, and find the ratio of comparison. In the context of this study, it is known that with the transition technique, participants reached the first phase of entrainment at 40 minutes. Whereas with the transition technique, the participant will reach the phase in 25 minutes. In finding the ratio using percentages, the results can be divided into the following (Listari, Harianto, & Widuri, 2022).

$$R= (N1/N2)x100\%$$

R: Transition technique effectiveness ratio

N2: Research result 2

N1: Research result 1

From the formula, we can see the comparison of the first and second studies from the average duration of each phase:

Phase I
Study 1=40 (minutes)
Study 2=25 (minutes)

R=(25/45)x100%
R=0,55x100%
R=55%

Phase 2
Study 1=70 minutes
Study 2=45 minutes

R=(45/70)x100%
R=0,64x100%
R=64%

Phase 3
Study 1=N/A
Study 2=90 minutes

R=(N/A:90)x100%
R=1x100%
R=100%

Phase 4
R=(N/A:125)x100%
R=1x100%
R=100%

From the above formula, it can be seen that the effectiveness of using transitions in producing entrainment phenomena in participants. In the first phase, the use of transition techniques made the process of participants achieving entrainment phenomenon more effective by 55%. In the second phase, the process became 64% more effective. For the next phase, the effectiveness increased to 100%, because the third and fourth phases were not achieved in the first study.

E. Influence to Discotheque Visitors

The transition technique at the same time not only changed the behavior of the participants. However, it also affected other discotheque patrons. It is a situation where an individual experiences entrainment, affecting other individuals. Then, the synchronization becomes a collective situation, which affects one other collective set. In general, these conditions become three stages of the impact of entrainment from one person to all discotheque visitors as follows (Philips-Silver, et al, 2010):

1. **Self-Entrainment** (SE) This is when the interaction between the music (oscillator) and the audience (oscillator). This is what happened to the participants in this study.
2. **Mutual Social Entraintment** (MSE) This is when the interaction between an individual who has entered a certain phase of entrainment, is synchronized with another individual.
3. **Colective Social Entraintment** (CSE) i.e. when the interaction of MSE results into one collective group, influencing another collective group. It is the latter condition, which makes the discotheque patrons as a whole become synchronized.

From the three stages from individuals (SE), individuals to other individuals (MSE) to groups to other groups (CSE), participants were able to influence almost all visitors to synchronize. Of course, this process can only occur when the participant has actually entered the entrainment stage. Thus, it can be concluded that the stages from SE to MSE, ending to CSE can only occur in the second study. That means,

the influence of DJ transition techniques is able to make this process possible. Additionally, the fact that participants' movements were more influenced by live music performances, rather than recordings (Swarbrick et al, 2019).

In the second study, on average, the SE process was achieved at 90 minutes. The SE process is the initial entrainment stage, or the third of the 4 entrainment phases. The author observed that the participants' movements, gestures, and movements gradually synchronized with other individuals occurred at the 140th minute. That means there is a difference of about 50 minutes from the SE process to the MSE process.

The MSE process puts one synchronized collective on the dance floor. This collective set is then integrated with other collective sets. This is called the CSE process. Visibly, it can be seen that one other group is connected and then synchronized with the group resulting from MSE with participants. Then the two collective groups become synchronized, which can be seen from the body movements that are in a periodic rhythmic cycle, and very accurately match the beat and pulse of the music presented by DJ.

The above explanation can be seen through the following table.

TYPE	DURATION (AVERAGE/ MINUTE)
SE	90 minutes
MSE	140 minutes
CSE	180 minutes

The final process (CSE) makes almost all visitors on the dance floor appear homogeneous. This impression can be seen from the similarity of the rhythmic cycles of their movements which have the same time/period as the beats and pulses produced by the music. From this conclusion, it can be concluded that the influence of transitional music has a big impact on the entrainment phenomenon received by discotheque visitors as a whole.

CONCLUSION

The results of this research prove that the transition technique used by a DJ is able to make discotheque visitors achieve entrainment, compared to DJs without this technique. Successful entrainment can also explain scientifically what happens to the human body when they lose control of their own body. This is due to the synchronization of biorhythms in their bodies with rhythmic input from outside.

This research also proves that entrainment will occur with various factors; such as intimacy, pleasure and the process of absorption in music. Transitions from one song to another with the right technique will provide these three factors, so that the audience's motor and nervous systems can be well synchronized with the beat and rhythm of the music. DJs who are skilled at using transition techniques will be very able to manipulate the participants' hearing, so that they will not realize that the music has slowly changed from one song to another, even up to dozens of songs. Coupled with the transition region section, then in at least 3 consecutive songs (25 minutes), the participants had entered the initial phase of entrainment (basic synchronization). This is much faster than perceiving music from a DJ without the ability to transition techniques which only enter the first phase after the 40th minute.

Participants also reached the second phase of entrainment (advanced synchronization) more quickly when responding to music from the DJ using

transition techniques, namely on average at 45 minutes. Meanwhile, when responding to DJ without transition techniques, the participants only entered the second phase at 70 minutes. Furthermore, the participants did not succeed in reaching the third phase (initial entrainment) during the first study, but entered initial entrainment at the 90th minute in the study. second. In fact, one of the participants entered the final phase (final entrainment) after more than two hours on the dance floor. This research was also carried out using visible observations. However, it requires carefulness and precision to see the rhythmic cycles of the participants. Entrainment conditions can only be seen from periodic rhythmic cycles, and are relatively the same for all participants.

Suggestion

Entraiment which is the result of participants' responses to music (which is supported by transition techniques) is associated with human evolution, in a biomusicological perspective. Humans are born with the ability to quickly respond to changes that occur around them. So, in the context of events in discotheques, rapid changes in the form of motor behavior are a real form of the response in question.

The transition technique supports a process of moving songs smoothly, so that it is able to maintain the conditions on the dancefloor well and dynamically. Until in the end, participants will move and interact with each other, then synchronization between individuals can occur. Slowly and gradually, this situation makes the entrainment process continue to increase from phase to next phase.

On the other hand, DJs without transition techniques will create a condition called "killing the music" or "break" in the middle of the synchronization process. This will stop the phase shift process. As a result, participants will stop moving, and have the opportunity to stop the act of perceiving the music.

Of course, this research still needs to be refined. The things observed by researchers will be very rational if supported by research from other scientific fields, such as physiology, psychology, neuroscience, and so on. Therefore, the author really hopes that there will be other research that improves, supports, or even refutes.

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