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MUSICAL INVOLVEMENT: A PERSONALITY TRAIT THAT DETERMINES MUSICAL EXPERIENCES

Background

This short study investigates musical involvement. We want to know whether this is a characteristic of a person (let us say, a personality trait) that determines musical experiences. Here we focus on those parts of a comprehensive study that were concerned with individual differences in musical experiences depending on the capacity for musical involvement, and also depending on the type of music listened to.

What is involvement? There are situations in everyday life when the individual is fully involved in a certain activity. These so-called hypnotic-like, or peak, or strong experiences have long been studied by hypnosis researchers, among others, to find a personality characteristic that is in connection with hypnotic susceptibility. A number of terms have been defined to refer to the individual differences in the capacity for involvement in these experiences. The most important of these concepts are ‘absorption’ (Tellegen-Atkinson, 1974), ‘imaginative involvement’ (Hilgard, 1979), and ‘phantasy-proneness’ (Wilson-Barber, 1983). Music seems to be a special field of involvement. Musical experiences are complex ones, which consist of images, emotions, thoughts, physical responses, etc. Psychologists, aesthetes and researchers of many other disciplines have tried to catch the essence of musical experiences for centuries. It seems obvious that involvement in musical experiences occurs, too. Hilgard (1979) found that the area of involvement in sensory experiences is the most hypnotic-like and says that while listening to a musical piece, a background of feeling and imagination characterizes the individual. Gabrielsson (2001) studied self-reports of strong experiences of music and gives a detailed description of these phenomena.

There are great individual differences in musical experiences. Perhaps the capacity for being involved in music is characteristic of a person. It may be different from general absorption in everyday experiences, since this field is very special.

According to former observations and questionnaire studies, the capacity for being involved in music is characteristic of a person. In our previous study, we found significant differences between high and low musical involvers considering music preferences, music-listening customs and meaning of music. We assumed that the capacity for musical involvement would influence the music-listening experience of our subjects. The other factor that may determine musical experience is the type of music. Related literature and everyday experiences suggest that different types of music induce different changes in the listener.

Aims

Aims of the present research were to study whether musical experiences show differences depending on the capacity for musical involvement and the type of the music listened to in a laboratory setting.

Methods

Instruments

Musical Involvement Scale. A 29-item, Likert-type scale was developed and used to measure the capacity for musical involvement (Nagy-Szabó, 2002).

Music. We chose 3 pieces of music for music-listening. The criteria for the choice were that the musical pieces should be different in style (to induce different experiences), and should be likely to be unknown for our subjects (to reduce the influence of previous experiences).

The musical pieces we used (15 minutes each):

- Gustav Holst: Planets / Venus, Neptun (contemporary)
- Kitaro: Moon star, Song for pray (easy-listening)
- Techno-remix from various artists (techno)

The Phenomenology of Consciousness Inventory (PCI). This questionnaire was developed by Pekala (1982), and is used for studying the phenomenology of altered states of consciousness in various fields. Scores are measured along 12 scales. Version I. and II. were both used.

Procedure

The Musical Involvement Scale was administered to 500 university students in Debrecen, Hungary. Summated scores of the questionnaire followed a normal distribution. High and low involvers (as defined by the mean and standard deviations of the scores: scores of more than $M+1$ SD, or less than $M-1$ SD) were asked to take part in the laboratory experiments.

In the experiments, subjects (N=120) had to speak about an interesting experience of their life first (control-state), then they filled in one version of the PCI regarding their experiences of that time. Then they listened to one of the musical pieces (randomly chosen) alone, in a darkened room, in a comfortable armchair. They explained their experiences in a free report (all reports were tape-recorded and then written down word by word for further analysis).

Subjects then filled in the other version of the PCI regarding their music-listening experiences. Finally, subjects were asked some questions about their music-listening experiences in a semi-structured interview.

Results

Analysis of the results

Free reports were content-analysed, data was subject to further analysis. We used Atlas.ti software for content-analysis of musical experiences, where the following categories emerged:

- Physical reactions (e.g. Moving, Physiological reactions, Changed body-experience)
- Emotions (Positive, Negative, Conflicting emotions)
- Perception (Tactile perception, Visual perception)
- Cognition (e.g. Memories, Imagery, Musical analysis, Thinking on actual problems)
- Trance-like experiences (e.g. Changed experience, Flow, Transcendental experience)

Reports of high and low involvers were compared by means of Mann-Whitney tests, differences between musical types were examined by means of Kruskal-Wallis tests. General Linear Models repeated measures test was used for the complex analysis of data emerged of the PCI.

Differences in the control-state

Content analysis of free reports. The content categories used for analysis of the musical reports did not show up in the reports of the control state. This means that subjects had totally different experiences in the two conditions, and the stories in this state were so diverse that we could not use the data of content analysis for comparing the groups.

Analysis of the PCI questionnaire. Unexpectedly, we found significant differences between high and low musical involvers regarding the experiences of the control-state as indicated by the PCI questionnaire. High involvers experienced greater alterations in their experiences ($p < 0.01$),

imagery ($p < 0.05$) and experienced more altered state of consciousness ($p < 0.01$).

Differences between musical experiences of high and low musical involvers

Content analysis of free reports. Considering the results of the free reports, high musical involvers had stronger experiences overall. We found significant differences in the following categories:

- Physiological experiences ($p < 0.05$)
- Movements ($p < 0.001$)
- Positive emotions ($p < 0.001$)
- Imagery ($p < 0.05$)
- Visual and tactile perception ($p < 0.05$)
- Trance-like experiences ($p < 0.001$)

Analysis of the PCI questionnaire. Analysing the PCI questionnaires, we found similar differences. Compared to the control-state, high musical involvers reported about greater alterations than did low involvers in the following PCI scales:

- Altered experience ($p < 0.001$)
- Positive emotions ($p < 0.01$)
- Focused attention ($p < 0.05$)
- Vivid imagery ($p < 0.001$)
- Relaxation ($p < 0.01$)
- Altered state of awareness ($p < 0.001$)

Accordingly, they had less volitional control over their experiences ($p < 0.05$).

Differences between musical experiences of different musical types. We found significant differences between the experiences of the groups listening to different types of music. Here we report about the specifics of the music-groups, we present the results of content-analysis and the analysis of PCI questionnaire combined.

Holst music: Compared to the other music-listening groups, listeners of the Holst music experienced more altered states of consciousness ($p < 0.01$), negative emotions ($p < 0.01$, e.g. fear), conflicting emotions ($p < 0.01$, e.g. ambivalence), imagination ($p < 0.01$), transcendental experiences ($p < 0.01$) and more physical reactions ($p < 0.01$). They usually saw dark forest.

Kitaro music: Subjects who had listened to Kitaro mostly reported about altered experiences ($p < 0.01$), positive emotions ($p < 0.001$, like majesty,

love), and increased imagery ($p < 0.01$). Their images usually consisted of huge hills, the sea, or flying in the sky.

Techno music: Those listening to techno music reported about few changes in subjective experience. Their musical experiences consisted of movements, visual perceptions of lights and colours ($p < 0.01$), and they had few emotions (mainly boredom or anxiety).

Analysis of the interviews

Analysis of the interviews revealed some interesting additional results. The most important of these are as follows:

- None of the 120 subjects had heard the music before.
- High involvers felt more comfortable in the laboratory situation.
- Low involvers were more precise in estimating the duration of music-listening.
- Those who liked the music they heard had stronger experiences than those who did not.

Conclusions

Capacity for musical involvement and type of music have a strong influence on musical experiences. Therefore, the Musical Involvement Scale proved to be effective in predicting the strength of musical experience, and furthermore, verified the assumption that musical involvement is a characteristic of a person that determines musical experiences. The two measurement methods corroborate each other's findings, PCI questionnaire and content analysis seem to be useful in studying the phenomenology of music-listening, and conceptualising incomprehensible elements of musical experiences.

References

- Gabrielsson, A. (2001). Emotions in strong experiences with music. In Sloboda, J. A. & Juslin, P. N. (eds.), *Music and Emotion*, Oxford University Press, Oxford, pp. 431-449.
- Hilgard, J.R. (1979). Imaginative and sensory-affective involvements in everyday life and in hypnosis. In E. Fromm and R. Shor (eds.), *Hypnosis: Developments in Research and New Perspectives*, pp. 483-517, Aldine, New York.
- Nagy, K., and Szabo, Cs. (2002). Individual differences in musical involvement. In C. Stevens, D. Burnham, G. McPherson, E. Schubert and J. Renwick, (eds.), *Proceedings of the 7th International Conference on Music Perception and Cognition*, Sydney, 2002, Causal Productions, Adelaide, pp. 506-509.

- Pekala, R. J. (1982) The Phenomenology of Consciousness Inventory. Psychophenomenological Concepts. Thorndale, Pennsylvania.
- Tellegen, A., and Atkinson, G. (1974). Openness to absorbing and self-altering experiences ("absorption"), a trait related to hypnotic susceptibility. *Journal of Abnormal Psychology*, Vol. 83 (3), pp. 268-277.
- Wilson, S.C., and Barber, T.X. (1983). The Phantasy-Prone Personality: Implications for Understanding Imagery, Hypnosis and Parapsychological Phenomena. In Sheikh, A.A. (ed.), *Imagery: Current Theory, Research, and Application*. Wiley, New York, pp. 340-387.