Musical Influences in Advertising

How music modifies first impressions of product

endorsers and brands

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0. ABSTRACT

The ability of music to create differentiating effects on subjects' impressions of product endorsers and brands of an advertisement were examined based on the theory of 'musical fit'. Subjects (N=132) listened to one of three versions of a radio commercial in which the music varied in each version. The music selections differed in style, tempo, rhythm etc. but matched product and message of the commercial in terms of 'musical fit'. After listening to the commercial, subjects rated the endorser's personality via the external version of a personality inventory. Impressions of the brand were measured using semantic differentials. The results concur with previous findings: depending on musical style, music can lead to significantly different impressions of the endorser as well as the brand without affecting general evaluations of the product. Based on sex interesting differences concerning music perception and its impacts were found. Self-critical annotations and suggestions for practitioners and future studies are discussed.

Keywords: *Music, advertising, musical fit, product endorser, brand, impressions, evaluation, different musical styles*

1. INTRODUCTION

Today music in multimedia is a tried instrument that influences perceptions in many ways. Most prevalent in advertising, its effects have been examined only insufficiently. The role music plays must be considered carefully because it creates attention, transports implicit and explicit messages, generates emotions and helps one retain information. Previous explanations of musical effects in advertising can be attributed to three predominant concepts in advertising research: the classical conditioning paradigm, the Elaboration Likelihood Model (ELM) and the concept of musical fit.

The Classical Conditioning Paradigm

Classical conditioning implies that pairing a product (neutral stimulus) with a well-liked piece of music (unconditioned stimulus) will produce an association between the two, and therefore a preference for the product (a conditioned response).

One of the most popular experiments regarding the effects of music in advertising was Gerald J. Gorn's experiment (Gorn, 1982). In keeping to the classical conditioning approach, he paired a light blue or a beige coloured pen (neutral stimulus) with both well-liked and disliked music (unconditioned stimulus). 79% of the subjects chose the pen with music they liked – a conditioned reaction.

Further studies by Bierley et al. (1985) and Tom (1995) supported Gorn's results but other examinations (Pitt and Abratt, 1988; Allen and Madden, 1985) did not arrive at his findings. It was not possible to create such conditioned responses for products of higher personal relevance like condoms. Middlestadt et al. (1994) doubted that studies using the classical conditioning paradigm could measure affective reactions to music. They found that music was able to spotlight different

features of products, to influence the recipients' feelings, and as well to influence their beliefs. Scherer and Zentner (2001) defined the affective changes that music is supposed to produce in the listener and identified the determinants of the listening situation including the musical structure of the piece, relevant listener state and trait characteristics, and respective context. Recapitulatory conditioning as a general process in advertising has to be questioned and is still being debated.

The ELM

The Elaboration Likelihood Model (ELM) by Petty and Cacioppo (1981, 1983) and the involvement-concept connected with it examined the topic in more detail and provided an integral basis to explain contradictory findings. ELM postulates two ways of changing or creating one's attitudes: a central route and a peripheral one. In theory, attitudes are defined as general evaluations of ourselves, other persons, objects or facts. These general evaluations rely on behavioural, affective and cognitive experiences and influence our behaviour, our emotions, our preferences and our knowledge. Attitudes are influenced through the central route when one has the motivation, opportunity and ability to carefully process information about a product. Then, the likelihood of elaboration is high and the person is in a state of high involvement with the product. If there is no motivation, opportunity or ability to process the product information, the peripheral route of persuasion remains in the foreground. Here, attitudes are formed less by active thinking about the object and its characteristics than by positive or negative associations with the object caused by music. The person in this case is in a state of low involvement with the product and conditioning effects are more likely. In a state of high involvement, the tendency of music to evoke emotion should disturb the recipients' purpose to elaborate the information within a commercial.

The ELM was supported by several studies involving cues other than music (e.g. Stuart et al., 1987; Petty et al., 1983). Related musical effects were examined by Park and Young in 1986. As

predicted by the ELM, music influenced subjects best in a state of lower involvement and disturbed subjects in a condition of high involvement. Recently, Olsen (2002) showed that information without sound is recalled better than information highlighted with music.

Along the lines of the ELM Chebat et al. (2001) described a model predicting that the effects of music on attitudes are moderated by cognitive processes (number of thoughts and depth of information processing). However, the authors warn that enhancing cognitive activity is no panacea, since they found that higher activity is associated with lower attitudes.

The idea of Musical Fit

MacInnis and Park (1991) argued that music that fits the ad, that interacts with the recipients' individual perception of its relevance or appropriateness toward the central ad message and product, may also have a positive effect on consumers in a state of high involvement: When elements of a stimulus set correspond with other items in the set, the individual parts are not perceived as separable, do not compete with one another for cognitive resources, and hence create "*emergent meaning*". In their experiment, the authors emphasized that music conforming to the commercial and its elements was able to change high involvement consumers' attitudes positively because it literally "undercoated" their convictions about the commercial's content. Thus, music here was less effective in influencing the attitudes toward the advertisement (as the classical conditioning approach would suggest) than by transporting and activating (further) relevant information. The authors state (1991: 162): *"Although it is part of the advertising execution, music that fits the ad can be conceptualized as a message-relevant executional cue because it supports and reinforces the basic advertising message"*. Additionally, Scott (1990: 225) emphasised the grammatical structure and communicative meaning of musical pieces (for a more detailed review of literature see Hargreaves and North, 1997: 268-274). Hung (2000, 2001)

considered the process by which consumers use music to create meanings. Her results indicated that the recipients knowledge of cultural texts form a reference point for reading commercials. Music in congruent ads reduced "noise" by reinforcing the connecting cultural context to communicate meanings (see also Mattila and Wirtz, 2001).

Different musical styles may provide different information for the same product. For example, either a rock song or a classical work could be used in a commercial for a car which is considered as a typical high involvement product (Kroeber-Riel, 1993: 222-225; Baker, 1993). The rock song would probably underline consumers' beliefs considering power, speed and competitiveness of the car, whereas the classical piece could point out beliefs about its interior trim, luxury and elegance. According to the idea of musical fit, both versions would make sense in their aim to transport relevant information about the car because both are congruent. The focus of this study is to examine what exactly happens when appropriate pieces of music are selected.

2. OBJECTIVE

How strongly can music that is fitting and message-congruent influence a commercial? Can different product- and message-corresponding musical styles sway recipients' perceptions in different ways?

The purpose of this study is to demonstrate how different but congruent musical styles can create different effects on our cognitions and emotions towards the content of an ad. Moreover, general evaluations with respect to buying intentions for a product should not be affected when musical fit is ensured. Previous research in the field of "music in advertising" was interested first and foremost in the influence of music on attitudes towards the brand, the ad itself, and buying

intentions. The product endorser as a person was rarely of interest. But is it not the endorsers who representatively come into contact with the consumer? Is it not they who give a product and a company an imaginary face with their look, their voice, and their personality? And is music in the position to modify our perception of the endorser, which in turn affects our image of the product? Is music in the position to determine our first impression of a person and the related brand? How does music influence our appraisal of an endorser's personality and the perceived character of the brand?

A minor aspect of this study is the effect of music tempo and rhythm on the listeners' subjective time estimate. Tonal and major musical modes lead to longer estimated durations of a commercial (Kellaris and Kent, 1992). In the discussion of their study, Kellaris and Kent called for continuing research with regard to the mode 'tempo and rhythm': *"The influence of other musical properties and their interactions, particularly those relating to music's temporal dimension (e.g. tempo, rhythm), should be investigated. It is possible that the pace or pulse of environmental music could alter the speed of the internal clock people are presumed to use in making temporal judgements. Finally, inclusion of a no-music control group in future studies would allow assessment of the extent to which subjects overestimate time as a function of music rather than a function of the estimation task itself"* (Kellaris and Kent, 1992: 375). In the frame of this study this can also be examined. Do we estimate the length of a commercial differently when tempo and rhythm of music are varied? Following Kellaris and Kent, tempo and rhythm should affect recipients' time perception. But if musical fit is considered to be a possible superior stimulus pattern, this could suppress the assumed effects.

3. HYPOTHESES

H₁: Different but fitting (congruent) music leads to different impressions of the product and endorser.

H₂: Different but fitting (congruent) music leads to different impressions of the brand.

H₃: Different but fitting (congruent) music does not lead to different buying intentions and different general evaluations of the brand.

H₄: There is coherence between the impression of the endorser and the impression of the brand.

H₅: Music in different tempi leads to different estimates of a commercial's length.

4. METHODS

Subjects

132 persons participated in the study (52.3% female, 47.7% male). The subjects' age ranged between 17 and 62 years with an average age of 28.4 (sd=9.4). To each of the three groups, 44 persons were assigned randomly. Group 1 was composed of 21 male and 23 female subjects (age: Mean=28.8, sd=10.8), group 2 consisted of 22 females and 22 males (Mean=28.1, sd=9.1) and the control group was composed of 24 females and 20 males. (Mean=28.3, sd=8.4). Homogeneity between groups regarding age and distribution of gender was given.

Design

An experimental design was chosen. Subjects were assigned to one of three versions of a radio commercial for a brand of mineral water with the fictitious name *"Avora"*. The versions differed in the selection of music:

A lively, joyful and easy-listening piece by Alec Gould (1998) titled 'Soft Shoe' was added to the commercial presented to group 1. In the booklet of the archive-CD, the genre of this piece is described as *'entertainment'* and *'amusing swing'*. Group 2 listened to a different version of the commercial. Slow, calm and contemplative music was in the background. The title of Mladen Franko's (2001) composition is '*Worth to Remember'*; is described as '*introspective, thoughtful piano ballad'*. Despite being really different in character (see Tab. 1), both pieces were considered as individually congruent with the commercial's content in terms of musical fit. Music I highlighted the refreshing and sportive aspect of the mineral water whereas Music II emphasised its health and relaxation aspects. Group 3 was the control-group and listened to a non-music version of the radio spot.

*Insert -***Tab. 1: description of the music pieces used*** - here*

The decision for the two different music pieces was made in co-operation with the experienced team of a professional advertising agency (www.werbegalerie.de). A detailed report of MacInnis' and Park's study (1991) was given to the experts. Every expert developed and later presented three proposals of message-congruent music-pairs. During several team sessions (5 persons including the author) the various music pieces were listened to, compared, contrasted and discussed with the focus being the criteria of musical fit (music-message-product congruency) and variety range. The team discussed how expected/unexpected the music pieces were with respect

to the remaining elements of the commercial (textual information, provided voice) and how well the pieces fitted with different possible impressions of the product (e.g. sporty or natural). The number of proposed musical pieces gradually decreased until agreement was reached on the two pieces to be used.

Previous research showed that music may have effects on consumers in states of high as well as low involvement. There are products that can be considered to be of higher personal relevance than others. Actually researchers argue that the impact of involvement is overestimated in the majority of cases (Kroeber-Riel, 1993: 222-225; Baker, 1993). For this study a low-involvement product (a bottle of water) was chosen because personal relevancies of high-involvement products seemed too hard to handle in the frame of this study. The personal Involvement of the subjects was not investigated.

The three commercials were recorded and produced in the agency's studio. A 31-year-old, professional male endorser narrated the advertising text. All three commercials were exactly 30 seconds.

Instruments

To record data considering the test persons' impressions towards the endorser (*H₁*, *H₄*), the approved personality inventory *Gießen Test* (Beckmann, Braehler and Richter, 1990) was used. This test is one of the most common test instruments in clinical use today in Germany. It contains 40 bipolar items, each with 7 graded answer alternatives. It is an economic, standardised (representative sample of N=1587), objective, reliable (the test-retest correlation for the scales lies between r=.65 and r=.76), valid and well-known questionnaire. The items are grouped into the following 6 scales (Table 2).

*Insert -**Tab. 2: The six scales of the Gießen Test**- here*

The GT measures self-images (internal attributions) as well as other-images (external attributions). The version of the questionnaire designed to measure external attributions was used in this study to let subjects evaluate the endorser. It especially measures persons' social attitudes and social behaviour, due to psychoanalytical and socio-psychological considerations. Included are (a) questions on emotional states, such as anxiety, underlying mood and self-control; (b) questions on ego qualities, such as introspection, imagination and permeability; (c) questions on basic interpersonal states, such as emotional closeness, dependency, trust and (d) questions on social reactions and responses by others.

The heights of the measured values refer to the right column of Table 2. The higher a value in any dimension, the more distinctive and pronounced are the characteristics of the right column considering the person in question.

The impression subjects had of *"Avora"* (H_2, H_3, H_4) was measured with the semantic differential (SD) by Osgood et al. (1957) and the German version by Ertel (1969) respectively. The version used consists of 18 bipolar antagonisms that can be subsumed in 3 dimensions. Subjects were given the brand *"Avora"* and presented with a variety of adjectives to describe it. The adjectives were presented at either end of a 5-point scale, ranging e.g. from 'good' to 'bad' or from 'fast' to 'slow'. In this way, it was possible to draw up a 'map' of people's connotations for the brand given and its affective qualities. Osgood's method is a development of the Likert scale and includes 3 major factors or dimensions of judgement:

- evaluative factor – e.g. 'good - bad'

- potency factor – e.g. 'weak - strong'

- activity factor – e.g. 'tense - relaxed'

Buying intentions (**H₃**) were recorded by questioning via 5 graded answering alternatives ('not at all' – 'definitely').

To record the perceived advert duration, subjects were asked to estimate how many *seconds* the commercial lasted (**H₅**).

5. RESULTS

The GLM (General Linear Model) Multivariate procedure provided analysis of variance for the multiple dependent variables by two factor variables ('music' and 'sex') and the covariate 'age'. Using this general linear model procedure, null hypotheses about the effects of the factor variables on the means of various groupings of a joint distribution of the dependent variables were tested.

The GLM Multivariate procedure provides multivariate analysis of variance as well as the univariate analysis of variance for each dependent variable. Effects of individual factors as well as interactions between factors are investigated.

After an overall *F* test has shown significances, univariate post hoc tests are used to evaluate differences among specific means.

Multivariate Analyses of Variance

An overall *F* test showed significance for factor variables 'music' (F=4.239, df=11, *p*=.000) and 'sex' (F=2.462, df=11, *p*=.008). Interactional effects between factors arrived only at F=1.327, df=11, *p*=.218. 'Age' as a covariate did not have an overall influence.

Univariate Analyses of Variance: factor variable 'music'

The calculation delivered significant mean differences on GT's third scale (self-control). Fig. 1 shows the arithmetic means of this dimension.

*Insert -***Fig. 1: mean differences in the rated self-control of the endorser***- here*

The Scheffé-test showed significant mean differences between the following pairs: Music I – Music II (p=.017) and Music II – No Music (p=.007). Subjects listening to the commercial with Music II rated the endorser as tidier, more eager and more serious compared to the other music conditions – Music II tended to result in a more self-controlled impression of the speaker. Recapitulatory, hypothesis H_1 has to be accepted.

Hypothesis H_2 has to be approved as well. The results arising out of the GLM showed highly significant mean differences for the dimensions 'activity' (see fig. 2; F=13.431, df=2, p=.000) and 'potency' of the SD (Music I: Mean=20.0, sd=4.76; Music II: Mean=17.8, sd=5.0; No Music: Mean=21.2, sd=4.02; F=6.288, df=2, p=.003).

*Insert -***Fig. 2: mean differences in the SD dimension 'activity' considering the brand***- here*

In the 'activity'-dimension, post hoc Scheffé-test resulted in significant mean differences between all pairs.

Music I led to a more agitated and animated impression of *"Avora"*. Subjects that listened to the Music II commercial saw the product as more quiet and calming. In addition, they perceived the brand as softer, more reserved, devoted and gentle.

It can be assumed that both musical pieces are congruent with the product (musical fit) and that is why differing buying intentions and differing general evaluations towards the brand were not expected (**H₃**). According to the hypothesis, the factor 'evaluation' of the SD did not differ significantly from the three conditions (F=.449, df=2, *p*=.639). Mean=24.0 showed a very positive general resonance toward the commercial over all experimental groups and the control group. Buying intentions were nearly the same in all groups, too (F=.299, df=2, *p*=.742).

Univariate Analyses of Variance: factor variable 'sex'

Women awarded the endorser higher values of positive social response (GT scale 1, women: Mean=34.6, men: Mean=31.5, F=13.040, df=1, *p*=.000) and found him socially more potent (GT scale 6, women: Mean=19.7, men: Mean=21.4, F=6.101, df=1, *p*=.015). They perceived the brand as even brighter, more positive, more attractive than men did (SD evaluative factor, women: Mean=25.1, men: Mean=22.8, F=10.738, df=1, *p*=.001).

Women showed a non-significant tendency rather to buy the product compared to men (F=3.139, df=1, *p*=.079).

Interactions

*Insert -***Fig. 3: the interaction between factors 'music' and 'sex' in the rated permeability of the endorser***- here*

Although the overall *F* test could not reach a significant level, univariate analyses found an interaction effect between music and sex on scale 5 ('permeability') of the GT. Of course this effect must be interpreted cautiously. Fig. 3 shows the crossing lines of the different mean values

(disordinal interaction). In this instance mean values of the different music conditions can be interpreted reasonably only in consideration of the subjects' sex. Men listening to Music I perceived the announcer as more closed, more distant, less self-disclosing and less trustful than women did. Underlying the commercial with the second musical piece reversed those findings. Women and men rated the speaker's level of permeability inversely again. But now women perceived him as more closed and less trustful. Without music, impressions of both men and women converged and levelled off to nearly the same value.

Correlations

To check the coherence between the impression of the endorser and the impression of the brand (**H₄**), partial correlation was used. It compared the values of the GT dimensions with those of the SD dimensions in consideration of the variables sex and age.

Positive as well as negative correlations were discovered. The following pair of dependent variables possessed positive linear correlations:

GT: Social Response – SD: Evaluation (r=.2831, *p*=.001).

The more subjects were attracted by the endorser, the more brightly, clearly and attractively the brand was perceived.

Negative linear correlations were the following:

GT: Dominance – SD: Activity (r=-.2568, *p*=.003);

GT: Dominance – SD: Potency (r=-.1800; *p*=.040);

GT: Permeability – SD: Evaluation (r=-.3016; *p*=.001);

GT: Social Potency – SD: Evaluation (r=-.2855; *p*=.001)

The more compliant, the more patient and the more co-operative the speaker seemed to be, the softer, the more liberal and the more delicate the perception of the brand *"Avora"* was.

Inversely, subjects evaluated the brand as darker, duller and bleaker when they found the endorser to be more closed, more removed from others, less imaginative and less sociable.

Hypothesis H_5

Hypothesis H_5 has to be abandoned. No significant mean differences were found considering the estimated duration of the ads. Interestingly, subjects' estimates were almost exact (average value of 29.17 seconds).

6. DISCUSSION

The most important realisations of this study complement the current state of research. Music has the ability to modify the impression that listeners of a radio commercial have of the product and endorser. Attributes like orderliness, diligence and level of exuberance were attached differently to the same endorser depending on the style of the music chosen.

Furthermore, impressions of the brand could be manipulated by means of specific music pieces. Depending on the music used, the brand imparted either softness and silence or strength and arousal.

The study was able to show that not only the differentiation between well-liked and disliked music, which was made in other studies, leads to different reactions, but also that different *but* product-message-congruent music in terms of the 'musical fit'-approach has its own differentiating effects. Even though the subjects' perception of endorser and brand varied, the evaluation of the product remained constant. Consequently, different music changes the focus of our perception without inhibiting positive reactions to a commercial when fit is given. Possibly, there is a latent expanded

fitting-process which selects and adapts all information and impressions of all elements and merges them into a congruent pattern or network as long as non-interpretable discrepancies between the different elements and contents of the commercial and its music are missing. Music seems to influence drastically this kind of selective perception and, consequently, the arising associative patterns.

Sex-differences were found as well. Women seemed to react more positively and more openly to commercials. The reason women liked the brand more than men did can be explained by the fact that the product endorser was a man (– recently North et al., 2003, gave interesting insights into adolescents' perceptions of the music of male and female composers).

Although it must be interpreted cautiously, the interactive effect on the dimension 'permeability' is remarkable. It did not occur in previous literature. It refers to a difference in the perception of music between men and women. Music seems to have a different effect on males and females. In search of fitting music, advertisers are therefore confronted with even more complex challenges.

Fewer stimuli and, thus, fewer biases extract musical effects more strongly, which weighed in favour of a *radio* commercial as communication media. Certainly the choice of music and endorser has to be considered self-critically. In lieu of pre-tests, the choice was made in team sessions with advertising experts. Extensive pre-tests would have been desirable but the frame of the study was too narrow. Besides, a more differentiated design that integrates a female endorser (additional factor: sex) would have been useful in exploring the light interaction between music and sex. In the same manner, the product could have been transformed into a typical male and a typical female product. Debevec and Iyer (1986) examined this distinction in another, only denotative way. But what can be regarded as a typical female and typical male product in a connotative, social psychological sense would have to be clarified beforehand. Furthermore one

should question and examine what musical styles consumers assign to what product groups. All these points could be incorporated into later studies.

Buying intentions did not differ between groups. On the one hand, this can be integrated into the theoretical construct of musical fit as both music pieces were in their way congruent with product and message: elements were perceived differently, but not more or less positively. On the other hand, it can be assumed that the transition from perception to behaviour can not transport certain information and impressions. Not to be mentioned are possible reactance-effects or the so-called "third-person-effect" (Davison, 1983; McLeod et al., 2001). Consumers are often convinced that in comparison to others ("third persons") advertising does not influence them. Subjects might have demonstrated this by hesitating to answer inquiries into their buying behaviour. An in-vivo-situational surrounding where subjects do not feel observed would possibly have led to other effects (see North et al., 2000). Operationalising such settings confronts scientists with apparently insoluble problems.

The subjects' estimate of the length of the commercials was nearly the same regardless of the music in the background. Maybe a realistic time-estimate is more connected to the presentation of congruent commercials than to differing musical styles.

7. CONCLUSION

For the advertising practitioner, the findings of this study advise that it is simply not only about creating general effects in terms of "let's take some beautiful music to make people buy our stuff". Under the condition of fit, music has to be considered and used in a more differentiated way. It is capable of more than just putting listeners into good humour. It can convey information about the

brand which words can not – least of all in 30 seconds. In association with spoken words, music can give a notional sharpness which is head and shoulders above speech itself. Differentiated advertising effects are more probable if the music chosen is not just positive, but especially positive for the product advertised. Here, music can be seen as a superior unconditioned stimulus. Findings bear interesting aspects for film music research (see Vitouch, 2001) and research considering para-social interactions respectively (see Vorderer, 1996). Bullerjahn (1999) emphasises the need to get a closer look into the effects of music on how recipients develop (para-social) relationships with media protagonists – the findings of this study give a first idea of the mechanisms behind this.

This article will conclude with an interesting observation that was made during talks which took place after the experiments: When subjects listened to the alternative musical variant of the radio commercial after the execution of the experiment, they still considered the first version, which they had listened to twice during the experiment, as more suitable for the product and its advertisement. One could conclude that a connection between a piece of music and a commercial is quickly learned ('mere exposure'). Products advertised seem to be identified rather quickly with a certain piece of music. It's music that makes a brand identifiable.

8. REFERENCES

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9. TABLES AND FIGURES

Tab. 1: description of the musical pieces used

	Music I: "Soft Shoe"	Music II: "Worth To Remember"
Style	*"Amusing Swing" (mainstream)*	*"Piano Ballad" (neo-classical pop music)*
Key/ Harmonisation	A^b-*major;* *11 of 14 bars major,* *2½ bars minor, ½ bar altered* *→ 79 % major*	A^b-*major;* *3½ of 8 bars major,* *4½ bars minor* *→ 56 % minor*
Tempo	*115 bpm*;* *constant*	*70 bpm;* *ritardando (last 2 bars)*
Time/Rhythm	$^4/_4$ *; ternary;* *constant rhythmic activity of drum set, guitar and bass on all full beats ("walking bass"); ostinate repeated, short rhythmic and melodic changes of the brass section ("riffs")*	$^4/_4$ *; binary;* *slow, gliding sonority; rhythm-markers given through harmony-changes in the theme (piano) mostly on beats 1 and 3; slows down gradually in the end*
Melody/Theme	*staccato played (short, terse) theme with typical jazz phrasing (ternary, odd); pitch range = one octave (12 tempered semitones)*	*legato played (bound) melody with a descending character; pitch range = one altered ninth (15 tempered semitones)*
Instrumentation/ Arrangement	*big band standard instrumentation; presentation of the theme by the trombones*	*wide string section and piano (performance of melody)*

**bpm = beats per minute*

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Tab. 2: The six scales of the Gießen Test

	Left side of scale	Right side of scale
Scale 1: **SOCIAL RESPONSE**	negative social response	positive social response
Scale 2: **DOMINANCE**	dominant	submissive
Scale 3: **SELF-CONTROL**	uncontrolled	compulsive
Scale 4: **UNDERLYING MOOD**	hypomanic	depressive
Scale 5: **PERMEABILITY**	permeable	retentive
Scale 6: **SOCIAL POTENCY**	socially potent	socially impotent

Fig. 1: Mean differences in the rated self-control of the endorser

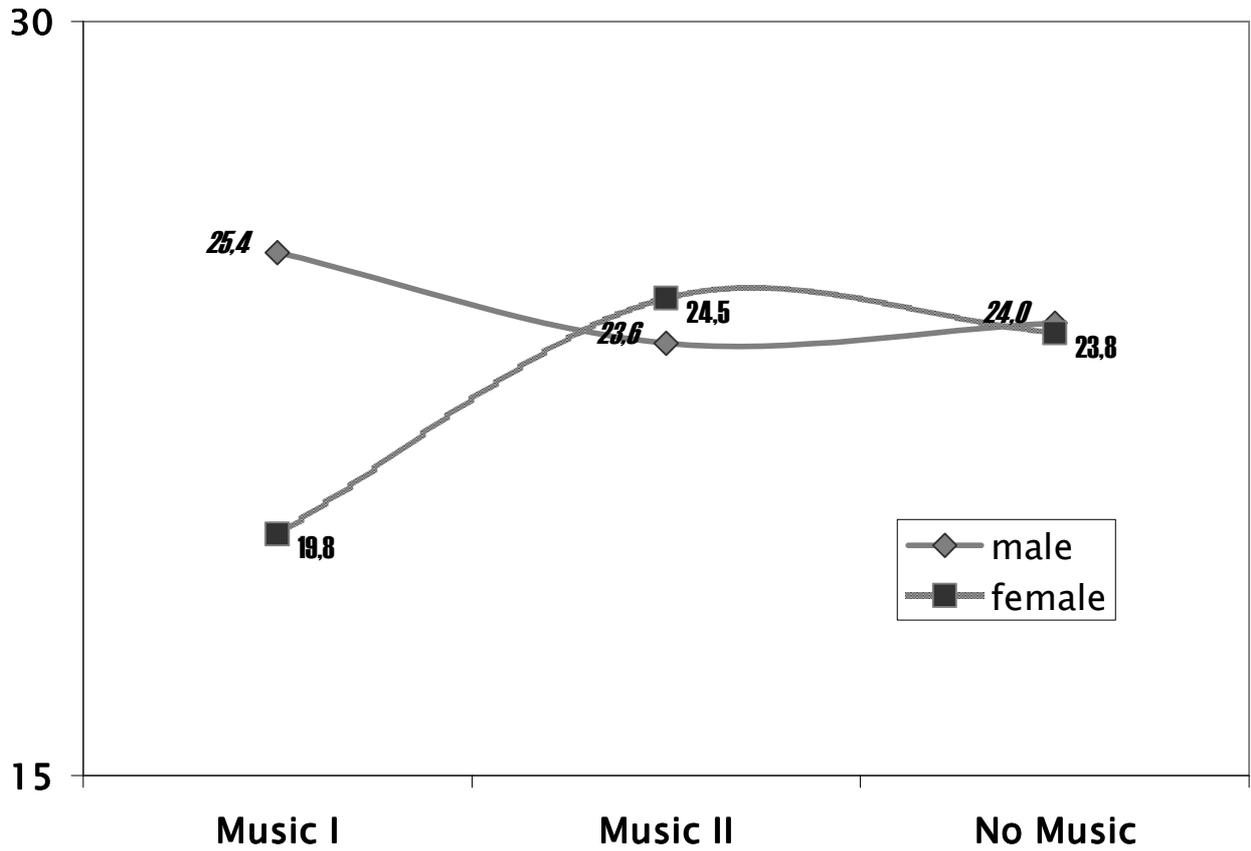**rated endorser's self-control**

condition
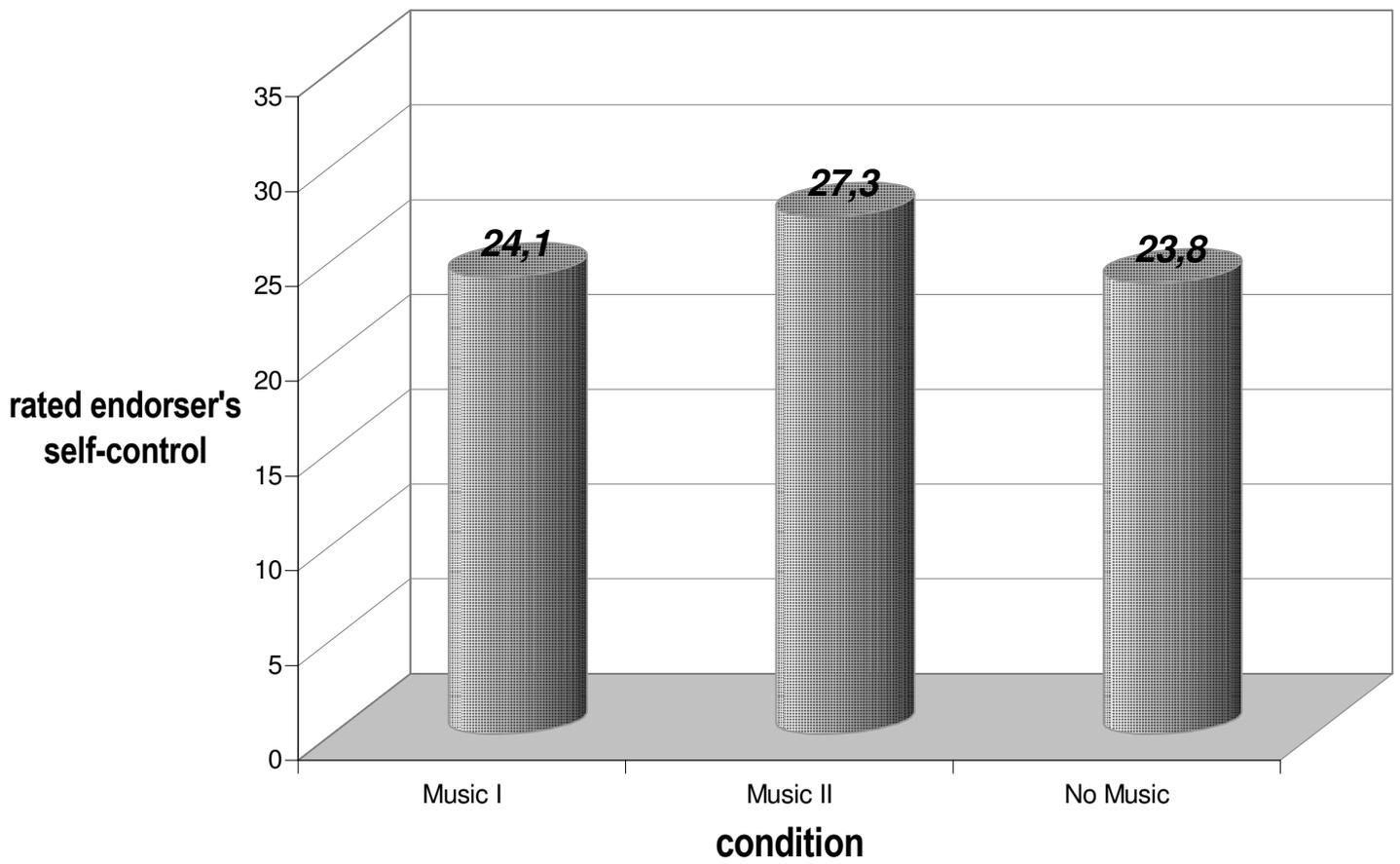
F (2) = 6.292, *p*=.002

Fig. 2: mean differences in the SD dimension 'activity' considering the brand
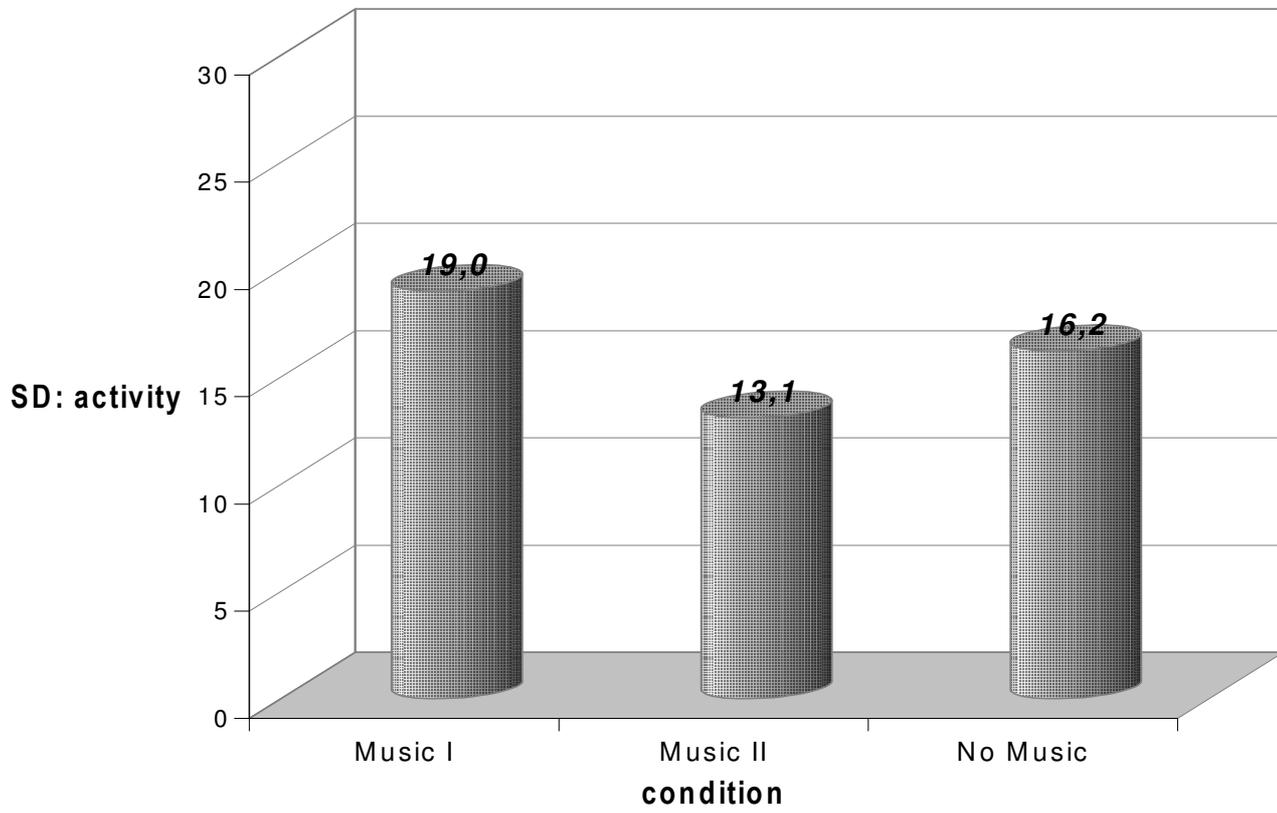
F (2) = 13.431, *p*=.000

Fig. 3: the interaction between factors 'music' and 'sex' in the rated permeability of the endorser

F (2) = 3.982, *p*=.021