

INFLUENCES OF MINORITY STATUS AND SOCIAL IDENTITY ON THE ELABORATION OF UNFAMILIAR MUSIC BY ADOLESCENTS

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ABSTRACT

Adolescents highly appreciate music and use it as a badge of identity. They elaborate on music-related topics in their own terms regarding two informational qualities: musical knowledge in terms of descriptive categories and musical meanings as they relate to the self and to social groups. This study investigates adolescents' ($N = 101$) music elaboration in the social context of minority status, social identity and expert status. In a controlled experimental setup, subjects listened to unfamiliar music and obtained discussion topics from an alleged group of earlier participants. In turn, they indicated their interest in the topics and invented their own. We report empirical effects on interest in discussion topics about music and on the initiative for the subjects' own contributions. The results are discussed regarding theories in social psychology and also the status of the music teacher in school.

1. BACKGROUND

Adolescents highly appreciate music as a badge of identity (Hargreaves, Marshall, & North, 2003). Their musical activity, namely listening, happens outside of school (North, Hargreaves, & O'Neill, 2000; Lamont, Hargreaves, Marshall, & Tarrant, 2003) and also entails informal learning (Folkestad, 2006). Our study considers the conditions of minority influence and social identity which facilitate or hinder music elaboration. We define music elaboration as adolescents' corresponding activities of thinking, talking, and making judgments about music. It focuses on the two informational qualities of musical knowledge and musical meanings which have been investigated in several studies in the last decades. Musical knowledge designates descriptive categories about music as an object. On the one hand this could be governed by acquired music theoretical constructs, such as the tonal hierarchy (Krumhansl & Shepard, 1979), or by more psychophysical listening capacities already present in infancy (Trehub, 2003). On the other hand, adolescents use their own descriptive categories when writing about music in an open response format (Kleinen, 1986; Kleinen, 1999; Flowers, 2003). Thus, they do not play the "language game of Western musicianship" (Cook, 1994, p. 69). Moreover, the aesthetics of pop music yield new descriptive categories, such as authenticity or the possession of music (Appen & Doehring, 2000; Frith, 2004). Additionally, style sensitivity (Hargreaves, North, &

Tarrant, 2006) is an adequate framework for such musical knowledge, whose content is not restricted to music theoretical terms.

However, music elaboration does not merely focus on musical knowledge, but also on the relation between music and the self or social groups. These aspects relate to musical meanings and develop music's impact as a badge of identity. Appropriate studies with open response formats focus on mood management with music (Saarikallio & Erkkilä, 2007) or on the uses of music in everyday life (Vorderer & Schramm, 2004). Vorderer and Schramm asked subjects to describe aspects of the music they would prefer in provided scenarios (e.g., a romantic dinner). In fact, adolescents can already write about the relationship between aesthetic judgments and corresponding uses of music: for instance, in making social contacts (Kleinen, 1986). Moreover, the beneficial effects of group singing highlight musical meanings related to group cohesion (Bailey & Davidson, 2005), and adolescents can use others' musical preferences to evaluate potential friends (Knobloch, Vorderer, & Zillmann, 2000). Accordingly, Zillmann and Gan (1997) stress that adolescents use language to convey their assumptions about causes and effects of music, elaborating on subjective musical theories (Behne, 1987). In summary, adolescents apparently spend considerable effort on music elaboration, and thereby focus on two musical aspects of knowledge and meanings.

Music elaboration happens in various settings in which the social influences originate from different sources: for instance, from peers, adults or music experts (e.g., teachers). How do these sources influence adolescents' music elaboration? How do social sources modify interest in music related topics, and what informational quality becomes the focus of music elaboration, knowledge or meanings? What condition facilitates innovative ideas and the initiative to express such ideas? We propose that music elaboration is influenced by social sources with varying degrees of social power, social identity and musical competence, as depicted in Figure 1. The influences operate in a three-way relationship between music, relevant others and the self. The self as a term in social psychology signifies each person in relation to its social environment, either in-group or out-group. In a paradigmatic situation, relevant others judge music respecting its two qualities, and the self obtains a message about this judgment. Then, in an appropriate task, music elaboration of the self manifests in five dimensions of (a) strength of interest in music, (b) focus of interest on musical knowledge or

meanings, (c) initiative for music elaboration, (d) innovation and (e) focus of ideas on knowledge or meanings. The influence of relevant others is also well recognized in music pedagogical research for instance, with respect to adults (Greer, Dorow, Wachhaus, & White, 1973; Thompson & Larson, 1995) or music teachers (Alpert, 1982; Creech, 2008). Our study now builds on this embedding of music elaboration in social contexts. It offers explanations that refer to three established social psychological theories of minority influence, social identity, and conflict elaboration.

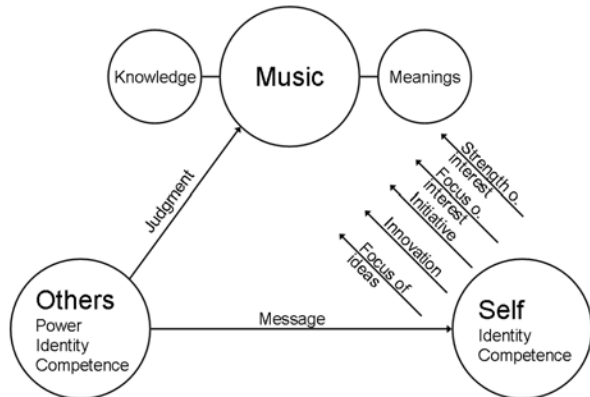


Figure 1: Model of social influences on music elaboration.

The influence of social majorities on subjective judgments was demonstrated early on (Asch, 1955; Deutsch & Gerard, 1955). However, social minorities also exert appropriate influence (Moscovici, Lage, & Naffrechoux, 1969), if they consistently endorse a deviant or unexpected position. Theoretically, a consistently expressed minority position stimulates private validation of its position regarding the judgmental object (Nemeth, 1986), divergence and innovation (Mucchi-Faina, Maass, & Volpato, 1991), and the objective reconstruction of the judgmental object (Pérez & Mugny, 1996). In the typical experimental paradigm, subjects (i.e., targets of influence) learn about majority or minority judgments (i.e., a social source) on an arbitrary object or issue and subsequently provide their own judgments. For example, the tasks involve searching among geometrical figures (Nemeth & Wachtler, 1983), or finding innovative marketing proposals regarding the public image of a city (Mucchi-Faina et al., 1991). In music, minority preferences for certain genres affect the subject's preferences in other genres (Aebischer, Hewstone, & Henderson, 1984). In fact, music as a source of meanings and knowledge appears to be best suited for initiative in validation, divergence or innovation. So, music-related judgments of a social minority may enhance adolescents' elaboration of unfamiliar music.

However, music is not merely a judgmental object but also a possessed entity (Frith, 2004), which operates as a “badge of identity” (Hargreaves et al., 2003), thus making interpersonal and intergroup behavior the adequate reference frame for music elaboration. The social identity theory distinguishes between interpersonal and intergroup social behavior (Tajfel & Turner, 1986) that people show in order to maintain self-esteem and a positive

self-image. Self-esteem results from in-group favoritism in intergroup comparisons (Turner, Brown, & Tajfel, 1979), or intergroup discrimination (Rubin & Hewstone, 1998). Concerning music, adolescents associate in-group members with more positively stereotyped music than out-group members (Tarrant, North, & Hargreaves, 2001). Moreover, music is used to expose a self-image in social contexts (North et al., 2000). Accordingly, if a relevant out-group endorses its position towards unfamiliar music, adolescents would exercise intergroup discrimination by showing little interest in the out-group's proposals and little initiative for innovative contributions.

In educational settings, the music teacher is a representative of an out-group with expert knowledge, but this intergroup context is not necessarily governed by disinterest in music. In fact, rather than provoking social discrimination, expert judgments invite imitation of their position or elaboration on the judgmental object – a phenomenon that can be explained by conflict elaboration theory (Pérez & Mugny, 1996). Thus, targets should show more interest in a music-related expert position than in a simple out-group position. They should also display more initiative for music elaboration. Moreover, the salience of expert knowledge resembles formal contexts of music elaboration, and therefore should focus subjects on musical knowledge instead of meanings.

2. AIMS

We studied social influences on adolescents' elaboration of unfamiliar music by examining the subjects' interest in musical discussion topics and their suggestions of topics. In four conditions of a randomized between-subjects design, the following three hypotheses on influences of minorities, social identity, and expert status were tested:

- Discussion topics about music suggested by an *in-group minority* of other adolescents foster interest and the initiative to create innovative discussion proposals as compared with an *in-group majority*.
- Topic suggestions by an *out-group majority* of adults create less interest and initiative as compared with *in-group majorities*, thus reflecting intergroup discrimination.
- Topic suggestions by *music experts* stimulate more interest and initiative for an individual contribution than an *out-group majority of adults*. Suggestions by *music experts* stimulate an elaboration focus on musical knowledge.

3. METHOD

3.1 Prestudies

In the first prestudy, we collected 150 statements about music by subjects from several previous studies (Behne, 1986; Kleinen, 1986; Behne, 1997; Kleinen, 1999; Flowers & Wang, 2002; Flowers, 2003; Vorderer & Schramm, 2004; Kleinen & von Appen, 2007;

Saarikallio & Erkkilä, 2007). The statements were reformulated as topics for a discussion about music (e.g., “Soothing the soul with music”, “The timbre of the music”). A sample of $N = 66$ adolescents (grades 10 and 12) evaluated whether each topic deals with musical knowledge or musical meanings. We then rank-ordered the topics according to their appropriateness as representatives of either focus, and collected the twenty best representatives, respectively. The second prestudy determined collections of 10 out of the 40 discussion topics which poorly matched ten musical pieces. Excerpts were collected almost randomly from the world music CD-repertoire of the Hanover University of Music and Drama. On the selected CDs one minute in the middle of a random track was extracted. Another sample of $N = 146$ adolescents (grades 10 and 11) evaluated how well the 40 topics fit a discussion about the music for each excerpt. Six excerpts yielded ten poorly fitting topics, five focusing on musical knowledge and the other five on meanings. Details of the two prestudies are provided in Lehmann and Kopiez (2009).

3.2 Participants

Adolescents from different schools in Hanover (Germany) visited the laboratory ($N = 101$, $n_{\text{female}} = 65$, $n_{\text{male}} = 36$, Age: 14;12 – 20;3 years), and received 10€ payment. The participants were invited by their music teachers in secondary school. Written parental consent was collected for those participants under 18 years of age.

3.3 Stimuli

The study used six musical excerpts (Table 1) and ten associated discussion topics, respectively. For each excerpt, half of the topics represented musical knowledge and musical meanings, respectively. Music was presented through speakers of an ordinary Hifi-System on a comfortable loudness level. A questionnaire contained instructions and test items for three experimental phases.

3.4 Procedure

The subjects visited the laboratory in groups of eight and worked at separate desks. The written instruction, “Tell us what you want to hear” (translation), and a short cover story introduced the task of participation in the discussion about music. Subjects were not informed about the social manipulation in this between-subjects design. The study proceeded in three phases. First, in order to ensure that the subjects constantly identified as adolescents, they gave five forced choices between statements in favor of adolescents. For instance, they agreed either to the statement “We adolescents should have more rights in societal decisions” or to “We adolescents should stick together in societal issues.” This format ensured that all subjects judged in favor of their own group only. Then, three additional items measured social identification, asking if subjects felt close to other adolescents, were interested in topics pertaining to adolescents and occasionally reflected on being an adolescent. In the second step we conducted the main experimental phase with manipulation of four social conditions. Subjects were presented with six musical excerpts, and read that discussion topics about the music were suggested unanimously by a group of subjects in a previous study. This group was made up of 12% of the

adolescents in the previous study (in-group minority), 88% of adolescents (in-group majority), 88% of adults (out-group majority), or 88% of music researchers (expert-group majority). Then, subjects rated their interest in the presented discussion topics (6-point scale between “no interest” and “strong interest”). Additionally, we recorded their own suggestions for discussion in an open response format, as a measure of initiative, innovation and focus of ideas (details in results section). The third experimental phase consisted of a questionnaire to check for manipulation, and it contained several control measures.

No.	Performer / Composer, Year, Title, Recording
1	Seoul Ensemble of Traditional Music (1992) Sangyongsan CD: World Network, 12, Korea
2	Herrmann (1951) The Day The Earth Stood Still – Suite CD: Film music by Bernard Herrmann
3	Kariya (2000) Haru no sayokyoku (Nocturne de printemps) CD: Japan - Shakuhachi and Koto
4	Golemovic (2001) Diko moja, slatka nevero CD: The Roma in Serbia. Anthology of traditional Gypsy music. Balkan Musical Archive Vol. 1
5	Ligeti (1961) Atmosphères für großes Orchester CD: Musiktage Donaueschingen: Uraufführungen 1955 - 1989
6	Chen (1997) Crows playing on a winter's stream CD: The sound of silk and bamboo. World network, 39, China

Table 1: Musical excerpts in presentation order used in the experiment.

4. RESULTS

Statistical analysis used a priori contrasts on five dependent measures for comparisons between four conditions. Due to a higher number of missing data, excerpt 1 was not included in the calculations. For each subject, strength of interest was computed by averaging ratings of interest across topics and across musical excerpts (possible range 1: little to 6: strong interest). The global measure of focus of interest was also computed across excerpts; however, the mean ratings for topics on musical knowledge were subtracted from the mean ratings on musical meanings, respectively (-5: focus knowledge to 5: focus meanings). Furthermore, the total number of suggested topics served as a measure of initiative for a contribution to the discussion about music (0-100 possible suggestions). To capture innovation and the thematic focus, $N = 30$ evaluators judged samples of the 1494 suggestions with more than one word. For innovation, evaluators judged if the suggestion simply restated the ten provided topics for the musical excerpt (1: redundant to 6: innovative suggestion). For thematic focus, they

Dependent measure	Experimental condition								MS_w
	in-group minority, 12 % adolescents ($n = 25$)		in-group majority, 88 % adolescents ($n = 26$)		out-group majority, 88 % adults ($n = 25$)		expert-group majority, 88 % music researchers ($n = 25$)		
	M	s	M	s	M	s	M	s	
Strength of interest	3.51	0.79	3.56	0.78	3.51	0.85	3.53	0.85	0.67
Focus of interest	0.31	0.56	0.30	0.86	0.34	0.67	0.38	0.53	0.44
Initiative	17.68	8.91	14.54	7.36	11.68	4.64	15.28	6.97	50.95
Innovation	4.13	0.55	4.07	0.66	4.40	0.55	4.45	0.73	0.39
Focus of ideas	3.66	0.92	3.53	0.73	3.85	0.74	3.70	0.73	0.61

MS_w : Mean squares within groups, for calculating t -values and effect sizes.

Table 2: Descriptive statistics of dependent measures in four experimental conditions.

evaluated if the topic was about musical knowledge or musical meanings (1: focus knowledge to 6: focus meanings).

Table 2 shows descriptive statistics. We tested a priori contrasts ψ between sample means. Positive contrast values match the direction of the respective hypothesis. All empirical contrasts ψ_{emp} are provided with t -Tests ($t_{df = 97, \alpha = .05, one-tailed} = 1.66$, * indicates significance). The standardized effect size, Cohen's d ($d = \psi_{emp} / MS_w^{1/2}$) with the conventions of low, medium and high values, are provided. Tests of hypotheses:

- The minority status of a social source moderately led to more suggestions of topics ($\psi_{emp} = 3.14$, $t = 1.57$, $p = .06$, $d = 0.44$) which were, however, not more innovative ($\psi_{emp} = 0.06$, $t = 0.32$, $p = .37$, $d = 0.10$). The two in-group conditions produced in the subjects almost the same interest in discussion topics ($\psi_{emp} = -0.05$, $t = -0.21$, $p = .58$, $d = -0.06$).
- The out-group majority condition yielded moderately fewer proposals than an in-group majority ($\psi_{emp} = 2.86$, $t = 1.43$, $p = .08$, $d = 0.40$), a finding that suggests intergroup discrimination; however, the same interest in discussion topics was found ($\psi_{emp} = 0.05$, $t = 0.21$, $p = .42$, $d = 0.06$). Interestingly, the in-group majority led to less innovative proposals ($\psi_{emp} = -0.33$, $t = -1.88^*$, $p = .03$, $d = -0.53$), suggesting a conformity effect within social groups.
- Concerning the influence of the two out-group majorities, topic suggestions by music experts stimulated more initiative than suggestions of adults ($\psi_{emp} = 3.60$, $t = 1.78^*$, $p = .04$, $d = 0.50$). However, no more interest in provided topics ($\psi_{emp} = 0.02$, $t = 0.09$, $p = .46$, $d = 0.02$), and no focus of interest ($\psi_{emp} = 0.04$, $t = 0.22$, $p = .41$, $d = 0.06$) or focus of ideas ($\psi_{emp} = 0.15$, $t = 0.66$, $p = .26$, $d = 0.19$) on musical knowledge was found.

5. DISCUSSION

Our results show promising effects of social power, social identity and expert status on music elaboration. However, careful examination is required because only a few contrasts actually achieved significance. Comparing the two in-group influences, a minority stimulated the initiative to invent discussion proposals more than a majority, confirming earlier studies on the thought-stimulating power of social minorities (Nemeth, 1986). Moreover, the in-group majority stimulated more initiative than the out-group majority. In contrast, the predicted disinterest in the proposals of the out-group majority was not confirmed. However, the often reported impact of the minority on innovation or originality (Nemeth & Kwan, 1985; Nemeth, 1994) was not found, but in the distinction between majorities of different social identities, the impact was greater. That is, the out-group stimulated significantly more innovative proposals, resulting in the biggest of the evaluated effects. Out-group discrimination could explain this effect, as if the subjects thought, "We are presented with the ideas of adults, so here are our own ideas to keep the boundaries clear. Better a new idea than an out-group idea!" However, compliance with the in-group majority could also explain this result. In sum, in terms of innovation the results show that out-groups have more influence than do minorities. In fact, some theoretical accounts confound the social identity difference and the power difference between social sources, stressing that the powerless minority is an out-group due to its non-compliant proposals. Perhaps the apparent distinctiveness explains some reported results on minority influences better than the lack of social power. Consequently, experimental comparisons between minority and majority influences need constraints on the social identity of source and target. Our identification of the subjects as adolescents and the social source as either adolescents or adults untangled the two factors of power and identity (compare also Volpato, Maass, Mucchi-Faina, & Vitti, 1990).

Interestingly, our results also show that out-groups are not discriminated against per se. Expert status of the out-group source yielded significantly more initiative to invent discussion proposals – but without stimulating either more interest in provided topics or the predicted focus on musical knowledge. Nevertheless, adolescents can be open for expert influence in the elaboration on

unfamiliar music, suggesting a stronger promotion of the music teacher's expert status in a school context. In fact, although music teachers will never cross the border between the in-group and out-group for their adolescent students, they can act as knowledgeable experts rather than as representatives of the out-group of adults. However, we used simple declarations of source status in the experiment; thus, further research could ask which features of out-group members cue the attribution of expert status.

Besides the conclusions about minority influences, social identity and educational settings, three more methodological points arose from the study. First, we emphasize the importance of the results with respect to standardized effect sizes, despite the mostly non-significant statistical tests. Effect sizes enable comparisons between studies or experimental paradigms on the same topic. For instance, if two paradigms attempt to capture the same theoretical concept, paradigm A possibly yields larger effects than paradigm B, implicating bigger sample sizes in paradigm B. Moreover, the APA Publication Manual (2001) insists on the presentation of effect sizes in research reports. Presently, a larger sample size could replicate our empirical effects with more test power.

Second, regarding the issue of constraints for social identity, forced choices between statements in favor of adolescents activated the social identity as adolescents in every subject in the experiment. This procedure avoids the confrontation of social identities (e.g., your school vs. another school (Tarrant et al., 2001)) without controlling for the identity of the experimental subject. Our experimental phase to set and control for identification could be a promising tool for future research. However, the use of this tool could also lead to subjects' guessing about the true aims of the study, thus threatening the cover story typical of social psychological research.

The third methodological issue aims at the presently combined open and closed response formats. The closed format entails straight forward quantification, but nevertheless simplifies elaboration on musical knowledge and meanings. Conversely, the open format captures the creative invention of topics about music, and is thus more conducive to music elaboration; however, this format is hard to quantify for statistical analysis. It requires the competent evaluation of the inventions in a subsequent rating experiment. In our case, constraining the responses to one line per idea and one minute of writing facilitated their further processing. In sum, combining closed and open response formats allowed quick quantification with simultaneous access to the content of music elaboration. Subjects produced only little missing data, suggesting that they could switch between formats.

The present research on adolescents' music elaboration applies social psychology in the domain of music and uses a controlled experimental setup with which further social-musical connections can be established.

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