Proceedings of the 7th Triennial Conference of European Society for the Cognitive Sciences of Music (ESCOM 2009) Jyväskylä, Finland
Jukka Louhivuori, Tuomas Eerola, Suvi Saarikallio, Tommi Himberg, Päivi-Sisko Eerola (Editors)

Musical Self-Concept
Presentation of a Multi-Dimensional Model and Its Empirical Analyses

Maria Spychiger,[*1] Lucia Gruber,[*2] Franziska Olbertz[*3]

[*]*University of Music and Performing Arts, Frankfurt Main, Germany*

[1]maria.spychiger@hfmdk-frankfurt.de, [2]lucia.gruber@hfmdk-frankfurt.de,
[3]franziska.olbertz@hfmdk-frankfurt.de

ABSTRACT

Research on the specific domain of musical self-concept was so far exclusively concerned with musically active subjects (such as performers, music teachers, students, or singing children). In contrast, the starting base of the presented research is that music is a distinct aspect in everyone's life and personality and that therefore musical self-concept is general and includes a number of domain besides achievement. The presented multi-dimensional model includes (i) non-academic and (ii) dimensions of musical ability. The first section entails representations with regards to "who I am" in music, such as emotional, social, physical, cognitive and spiritual notions, while section two addresses self-representations with regard to "what I can do" in music, such as singing, rhythmic, listening, playing instruments, arranging, composing abilities. The model itself and a number of related hypotheses are evaluated within a qualitative study. Semi-structured interviews have been conducted on a sample of n= 63, divided into subgroups of five levels of musical expertise which range from "music listeners" to "professional musicians", and five age groups. As a quantitative factor, "nearness-to-self" estimates on the various dimensions of the model are assessed. These latter results are presented in the following paper.

I. INVESTIGATING MUSICAL SELF-CONCEPT

Self-concepts are important factors in regulating a person's behavior and well-being. While earlier in the 20th century self-concept was understood as a generalized, unitary construct, the term was increasingly put in the plural form, after it was revealed that the topic is domain-specific. Self-concepts are the result of a person's self-perceptions, self-appraisals, self-representations, self-evaluations, and, finally, self-descriptions. It then makes a difference whether this person thinks of him- or herself in the domain of, say, mathematics, or, perhaps, sports, social bonding, and so forth. Self-perceptions vary across the domains of one's life. This new understanding of self-concept led to a resurgence of interest in the self-system after the later 1970s (Shavelson, Hubner, & Stanton, 1976; Damon & Hart, 1982; Harter, 1983; Marsh, Smith, & Barnes, 1983).

A. Introduction to the study

It is in this sense that we look at the musical domain of self-concept, and take it a step further than other researchers have done so far. They conceived it to be part of a person's life with regards to achievement. Accordingly, musical self-concepts are so far investigated exclusively in musicians, music students, music teachers, and musically gifted or especially musically active children (in a few studies). It looks as if researchers think that people who are not professionally occupied with music would not have a musical self-concept.

B. Sample with five levels of expertise

The underlying thought of this research is that music is a strong reality in everybody's or at least most people's life, and is also present in people who do not have a positive or "healthy" self-esteem regarding their musical abilities. In order to investigate the construct, we in this sense first set up levels of musical expertise, aiming to include people with less or no musical education and who rather just listen to music than try to produce it themselves, as well as professional musicians and people who are musically active in various ways. We set five levels of expertise as shown in table 1. A short inquiry was created in order to allocate the subjects to the groups, a procedure which confronted us with the reality of group 4, initially not included in the design to this study.

Table 1. Levels of expertise in musical activity. Subjects assigned to five groups.

Group 1	Professional and employed musicians (or retired). Holding degrees from educational institutions.
Group 2	Amateur musicians. With a professional identity, and perceived as musicians, but without degrees from state institutions. Earning their living completely, or partly, with music.
Group 3	Leisure musicians. Persons who make music in terms of hobby or casual activity, but who do not declare themselves to be musicians.
Group 4	Music workers. Persons who are professionally occupied with music, not as performers, but in providing to listening or playing music (i.e., audio engineer, piano tuner, concert manager, etc. etc.
Group 5	Music listeners. Persons who engage with music more or less exclusively by listening to it, not do produce it.

The sample to be accumulated in order to investigate musical self-concepts in a broad variety of people should also cover all age groups. Table 2 shows the sample design as created on this basis.

II. DESIGNING A MULTI-DIMENSIONAL CONSTRUCT

The model on the construct of musical self-concept is conceived to be multi-dimensional (Spychiger, 2007), and is the starting point of a 2-years project, which is now in its 2nd year of research. It contains two separate studies: Study 1, of which one part is presented here, is on designing and evaluating the construct. Study 2 is on developing a questionnaire which will be named "Musical Self-Concept Scales". The suggested model (as shown in figure 1) includes representations with

regards to (i) non-academic components, in the sense of "who I am" in music (such as emotional, social, physical, cognitive and spiritual notions), and (ii) the academic component, addressing the sub-domains of musical ability, in the sense of "what I can do" in music (such as singing, rhythmical ability, listening, playing instruments, arranging, composing ability etc.).

Table 2. Sample design of study 1 (testing the model).

		Level of expertise					
Age group	gender	1	2	3	4	5	n per age
1 young adults (18-30 years)	f	1	1	1	1	3	14
	m	1	1	1	1	3	
2 middle aged (31-50 years)	f	1	1	1	1	3	14
	m	1	1	1	1	3	
3 older adults (51-65 years)	f	1	1	1	1	3	14
	m	1	1	1	1	3	
4 young seniors (66-80 years)	f	1	1	1	1	3	14
	m	1	1	1	1	3	
5 older seniors (81-95 years)	f/m	1	1	1	1	3	7
n per level of expertise	f/m	9	9	9	9	27	**=63**

III. SCALING THE DIMENSIONS

As for the method to investigate the construct, semi-structured interviews were conducted and content-analysis performed on all 63 interviews. Evaluation of the model is carried out as top-down process on the one hand, and, on the other hand, by bottom-up analyses to find out about *developmental aspects* of musical self-concept.

We look in this short presentation at only a very small part of the collected data. It represents, however, essential results with regards to the innovative dimensions (or, components) of the construct, and does this in a quantified way of presentation: We generated a measuring tool for the non-academic components of the model by setting them on a 5-step scale with regards to "how close to me" each of them feels (as shown in figure 2).

This assessment was performed during the interviews, and filed in by the subjects themselves. The nearness-to-self construct as well as the procedure of assessing it is an adaptation of how Ursula Kessels and Bettina Hannover (2004) created and used it in order to assess students' preferences of school-subjects.

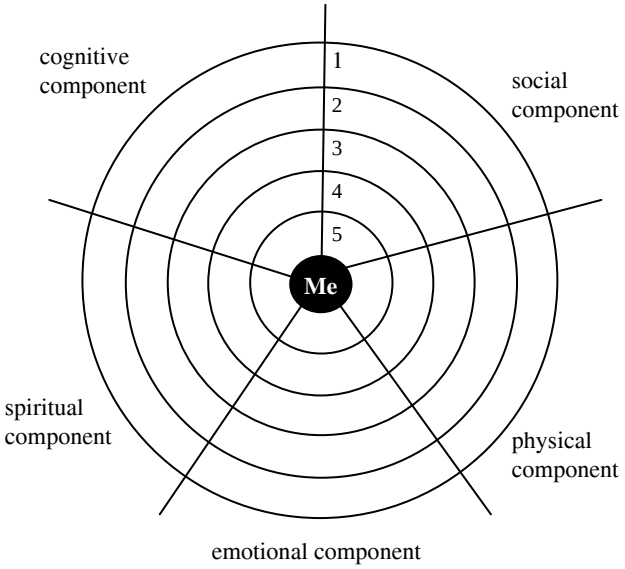

Figure 2. "Nearness-to-self" assessment of the non-academic components. Likert scale with steps 1 to 5.

IV. FIRST RESULTS

Data of 56 subjects are processed at this time. The sizes of group samples are small and not too much should be inferred from the frequencies and few tests carried out so far on these data. But looking at these first results, one is encouraged to pursue a multi-dimensional model of musical self-concept, and it can be safely said that people of all groups do have strong self-representations with regards to the musical domain of their life. Consistent with the results in a pilot-study to this project, on musical biographies (Wysser, Hofer & Spychiger, 2005), the emotional aspect is the most prominent one among all groups. Frequencies are listed in table 3.

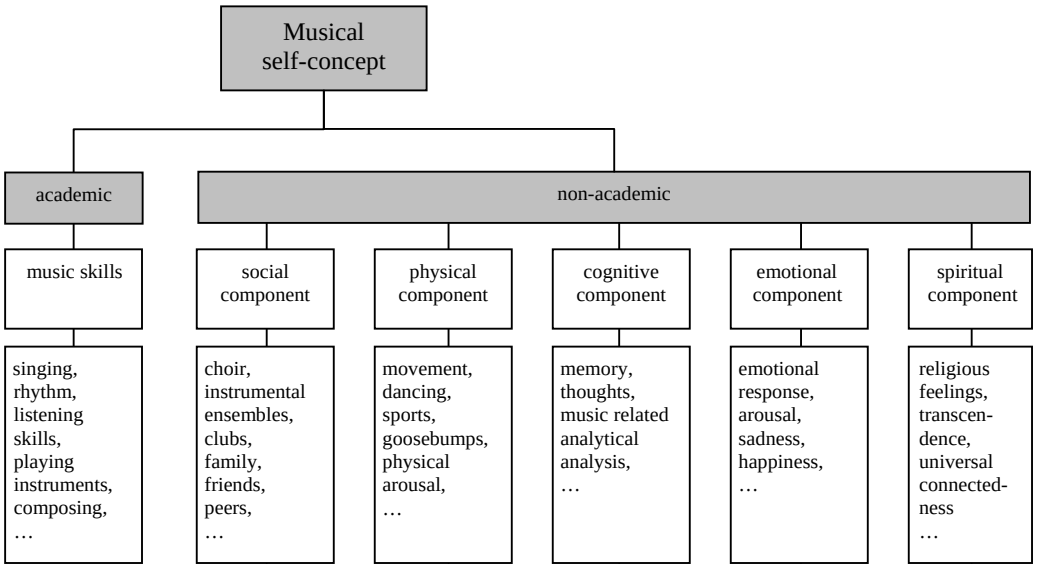

Figure 1. Multi-dimensional model of musical self-concept. Structure with sub-domains and contents.

Table 3. "Nearness-to-self" frequencies over components and groups of expertise (n=56).

Level of expertise	cog	soc	phy	emo	spi
group 1 (n=7): employed musicians	3,57	3,71	2,29	4,86	2,71
group 2 (n=10): amateur musicians	3,30	3,80	3,80	4,90	2,50
group 3 (n=10): leisure musicians	2,60	4,40	3,20	4,60	3,10
group 4 (n=8): music workers	3,75	4,00	3,38	4,38	2,00
group 5 (n=21): music listeners	2,43	3,33	3,33	4,48	2,33
arithmetic mean	3,13	3,85	3,20	4,64	2,53
rank	4	2	3	1	5

The graph as shown in figure 3 reveals some interesting details, such as the cognitive component to be strongest in music workers and professional musicians, while the spiritual component seems to be most prominent in leisure musicians. Statistical tests will be systematically performed after completing the sample. Further investigation will be needed to further develop these possible outlooks on the musical self-concept.

In order to process the "extent" of the musical self-concept, we inversed the nearness-to-self scale and attempted to visualize musical self-concepts of the sample with its sub-samples as shown in figure 4. This approach reveals further interesting details, among them that the musical self-concept in the group of lowest expertise, the music listeners, is indeed the "smallest" one. But it nevertheless is fully "there" in all components, and seems to be consistent with the musical self-concept of the subjects in the groups with more musical practice and expertise. We are aware that the full sample carries a lot of the data of this sub-sample, since it is the largest one among the five. Larger samples and further investigation will be needed to further develop these possible outlooks on the musical self-concept.

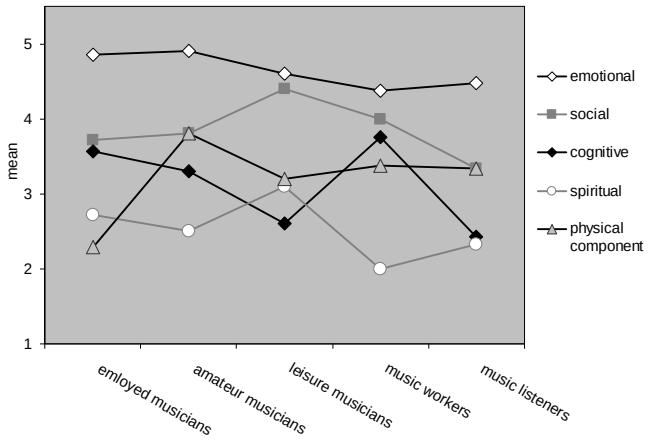

Figure 3. Representation of the components by level of expertise (n= 56). The measurement taken is "nearness to self", 5=nearest to, 1=furthest away from self.

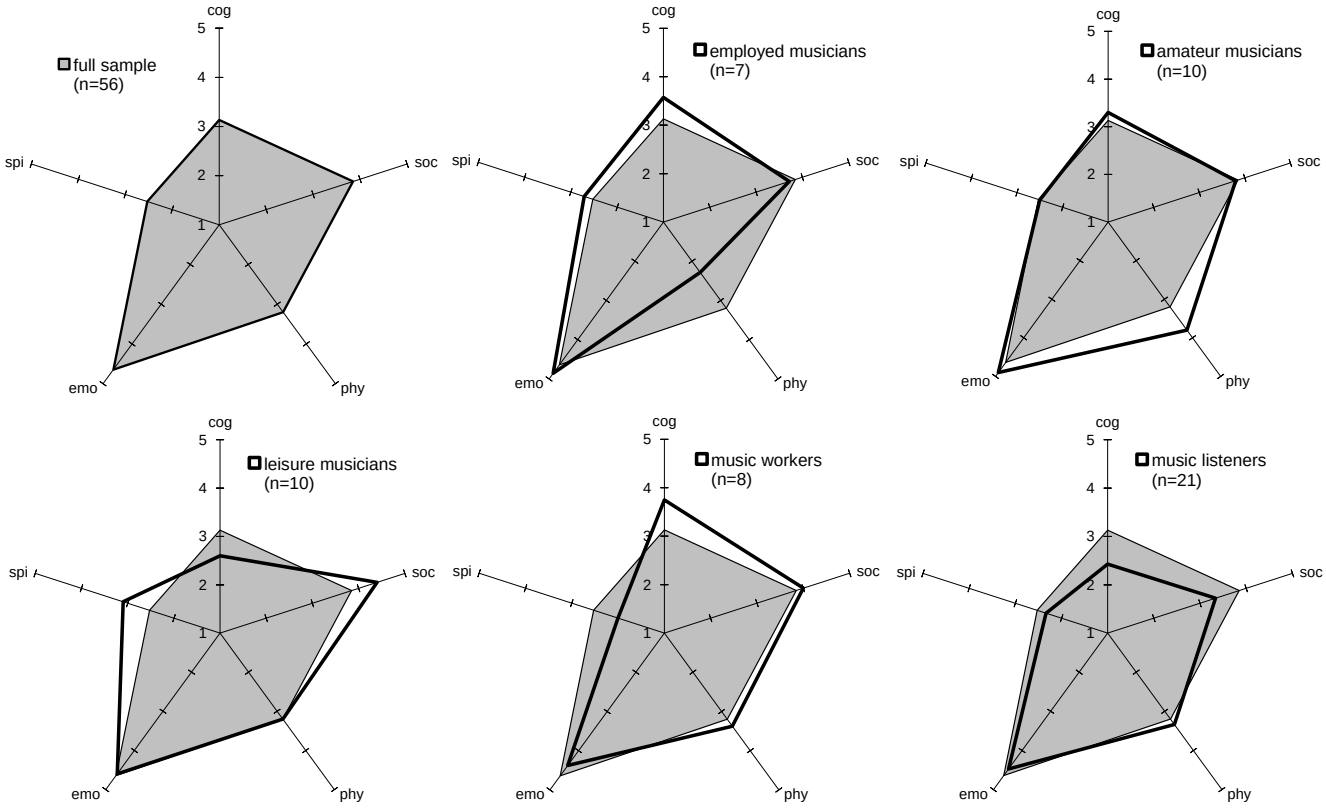

Figure 4. Representation of the components by level of expertise (n=56), measured as "nearness-to-self" estimates (5=highest, 1=lowest).

V. FIRST CONCLUSIONS

Multi-dimensionality as a basis for modelling musical self-concept has proven to be a fertile approach to investigating it. We will pursue this path and report later the results from the content-analyses, while we already start on building the parts for the "Musical Self-Concept Scales".

A significant value of the model is in that it is useful not just for assessing musical self-concepts, but also for understanding musical development. Content-analyses will address these questions almost as much as those related to testing the model, and in doing so, focus on important research questions, as well as generate new ones.

Besides this, we experienced that the interviewees themselves are interested to learn about their musical self-concepts. Using the multi-dimensional model is therefore also a way to, and a tool for, introspection. One can use it autonomously and enter self-reflective processes with regards to his or her musical life, motivation and capacity.

ACKNOWLEDGMENT

We thank the Swiss National Research Foundation for supporting this project with grant no. 100013-116208. We also thank the University of Fribourg, Switzerland, for its guidance during the application procedure, and the University of Music and Performing Arts, Frankfurt Main, Germany, for hosting the transferred project.

References

Damon, W. & Hart, D. (1982). The development of self-understanding from infancy through adolescence, *Child Develop*, 53, 841-864.

Harter, S. (1983). The developmental perspectives on the self-system. In P. Mussen & E. M. Hetherington (Eds.), *Handbook of child psychology, Vol. 4: Socialisation, Personality, and social development* (pp. 553-617). New York: Wiley.

Kessels, U. & Hannover, B. (2004). Empfundene „Selbstnähe" als Mediator zwischen Fähigkeitsselbstkonzept und Leistungswahlintentionen. *Zeitschrift für Entwicklungspsychologie und Pädagogische Psychologie*, 36(3), 130-138.

Marsh, H. W., Smith, I. D., Barnes, J., & Butler, S. (1983). The self-concept: Reliability, stability, dimensionality, validity, and the measurement of change. *Journal of Educational Psychology*, 75, 772-790.

Shavelson, R. J., Hubner, J. J. & Stanton, G.C. (1976). Self-concept: Validation of construct interpretations. *Review of Educational Research*, 46, 407-441.

Spychiger, M. (2007). „Nein, ich bin ja unbegabt und liebe Musik". Ausführungen zu einer mehrdimensionalen Anlage des musikalischen Selbstkonzepts. *Diskussion Musikpädagogik*, 33, 9-20.

Wysser, C.; Hofer T. & Spychiger, M. (2005). *Musikalische Biografie. Zur Bedeutung des Musikalischen und dessen Entwicklung im Lebenslauf, unter besonderer Berücksichtigung des schulischen Musikunterrichtes und der pädagogischen Beziehungen.* Final report to the research committee of the Bernese teacher education (Research project no. 0002S02).