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“Invisible management” – group cohesion in semi-professional music groups

Small music groups seem to profit from invisible management. To explain this phenomenon the present study shows a three-dimensional concept of group cohesion to be useful. The analysis realised visualization and numerical foundation of a musical dimension, an organisational dimension and a social dimension of group cohesion for the context of semi-professional small groups in popular music. Five bands consisting of 20 musicians in total were assessed via semi-structured interviews. The average identification of musicians with their bands corresponds with musical cohesion only. In summary it seems for music groups to endeavour in extra-musical tasks and goals is heightening the overall group cohesion. Once the shared musical goal is set bands ought to leave the rehearsal room and make joint experiences to build up the basis for long-term group cohesion. Positive effects of the social dimension on overall group cohesion as described in psychological literature cannot be confirmed here. Knowledge about group processes especially in the context of music making are until now missing in the teaching of future professional musicians. Results are recommended to be incorporated into music high school curricula.

Key words: small group research, group cohesion, social interaction, music psychology, identification

Introduction

In his book “Groups That Work (and Those That Don’t). Creating Conditions for Effective Teamwork” Hackman (1989) chose to let Butterworth describe among 27 differing working groups a music group as example for a performing group. Working groups are here defined as a) real groups – social systems with mutual dependent roles and defined members and goals, b) performing a task together –

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following joint goals or results which can be assessed, and c) creating an organisational context – relationships to organisations or f.i. audiences. One striking result was what Butterworth (1989) called *invisible management*: collaboration in the music group was based on conventions which seemed to be negotiated a long time ago. Tasks were taken care of without being asked. The direction of group work was predetermined by music. The self-invented music group was self-governing, and all musicians were members by their own volition – a huge difference to most other working groups. This set up was leading to a matured social behaviour with everyone dealing with strengths and weaknesses of every other musician. In conclusion it seems music groups are a unique kind of working group with functioning worth of deeper going research: Which are the underlying principles making invisible management possible? And how can these be assessed?

Making music is a social phenomenon. One plays with others or for others. Long-lasting existences of music groups require group cohesion. Although Hargreaves and North redressed the balance of clear social dimensions within contexts in which music is produced and perceived (Hargreaves & North 2004) sections about group functioning did not discuss small ensembles of popular music or the non-professional sector of music making. In this context the relationship between self and group becomes relevant (see Rosenbrock 2006: 25ff.). This relationship has been discussed widely in social psychology (see Correll & Park 2005 for an overview). A tool to summarize and apply these findings was presented by Tropp & Wright (2001) with the IIS – identification of ingroup in the self. The IIS is a useful tool to easily measure and visualize the relationship between members of a group and the group itself. With the model of optimal distinctiveness (Brewer 1991: 475) everyone has the opposing need for assimilation and differentiation from others at the same time, leading to the strategy of comparing one's own group with other groups. This is problematic in too small or too large groups. Therefore, conflicts in small music groups are inherent and every band musician strives to position him or herself on the social dimension as well as on the musical dimension, the latter regarding sound and musical identity (see Berliner 1994: 417ff.). So, the social construction of a band as a small working group leads towards the need of every member to identify him or herself not only by filling out social roles but also by using the task dimension – being musical in the present case.

But what makes a music group? Piontkowski's (2011: 99) social psychology definition of the term group in general comprises two or more persons interacting and being aware of their mutual group membership. Music bands require a stable membership, meeting regularly and composing together (Liang 2003a, 2003b; Wicke 2003; Wicke, Liang 2003a; Liang 2003b; Wicke, Liang & Huron 2003; Middleton 2003). In personnel psychology groups with stable role allocations in regard

of shared goals are coined teams (van Dick & West 2005). Following Hackmann (1989) a band with role allocation and objective target acts as a team. Therefore, the transformation from an amateur band to a semi-professional band striving for entering the music market (for definition of semi-professional see Marx 2017: 53 ff.) is a transformation from a group towards a team. Amateur bands start to compose together and advertise and present music to audiences and organise themselves. They share goals and follow tasks and are becoming teams. Therefore, next to the shared goal of making music together comes the second shared goal of organisation. First a band needs to organise itself for example in regard of regular rehearsal appointments. Second a band needs to organise self-promotion regarding venues, audiences and service providers like merchandise production for getting their product out of the rehearsal room.

This all makes clear that in order to look into invisible management of small music groups from a social psychology perspective it seems to be fruitful to consider a) the group composition in regard of the intrapersonal relationships of the musicians – the social dimension; b) the relationship of musical commitment versus musical individuality of each musician towards the band – the musical dimension; and c) the group acting as a team – the organisational dimension. The meeting characters within a music group substantiate the altitude of a bands ability to permanently work together on all three dimensions. Therefore, research should always be aware of regarding bands as a social and unique construct that always needs to be researched via a qualitative approach at first.

Looking at bands and invisible management from a musicologist perspective, literature is less explicit about group functioning. Amateur musicians meet primarily for social reasons (Pape 2005: 256). Still the outcome is the complex product of music pieces – sometimes with high quality. Non-task activities have been found to produce higher quality performances of groups (Karau *et al.* 1991). Amateur and semi-professional musicians are driven socially (Tennstedt 1979; Clemens 1983; Stroh 1984; Cohen 1991; Spieß 2000; Schneider 2001; Rosenbrock 2002; Pape 2005; Hemming *et al.* 2015) and the self-concept of band musicians relates to identification with their music groups (Tropp & Wright 2001; Correl *et al.* 2005; La Motte-Haber 2005; Rosenbrock 2006). In consequence of this interlacing of social and musical orientation music groups develop a feeling of belonging together – a WE-Feeling (La Motte-Haber 2004) – group cohesion because of their activities. The single semi-professional musicians profit from group cohesion when composing together: The process enhances the self-concept of being musician resulting in higher self-efficacy which on the other hand effects working processes in groups positively. One can summarise: Making music together requires and profits from group cohesion (Witzel 2000; La Motte-Haber 2004; Rosenbrock 2006).

Group cohesion

For a group to endure a positive group climate and high group cohesion are necessary. Research on group cohesion started more than 70 years ago in the context of sports. Pescosolido & Saavedra (2012) claim the construct to be unsatisfactory to measure the concept outside of groups with clear goals, role allocations, working procedures, etc. – teams only profit from group cohesion when real time decisions are part of the game. In a meta-analysis Mullen *et al.* (1994) were able to show connections between group cohesion and performance in natural groups rather than in artificial groups in laboratory settings. Since group cohesion then was not defined unitary from three formerly common dimensions only two are still accepted in cohesion research now: interpersonal attraction and commitment to task. A widely acknowledged tool today is the group cohesion questionnaire (GEQ, Carron & Brawley 2012) with four dimensions: In addition to the distinction between social and task it differentiates between perception of the group as belonging together (group integration) and attraction of individuals to the group (attraction to group). Measurements of cohesion on the group level proved to be superior to individual perception (Greer 2012). In a study focussing on working groups a two-factor structure dividing social and task on group level was found (Chang *et al.* 2006). In a prior study Chang *et al.* (2001) found the group level to be important in regard of performances that require interaction and creativity. For the context of small music group cohesion all these findings point towards the usefulness of a construct operating on the group level and differentiating between a social and a task dimension. In the context of personnel psychology van Dick *e& West* (2005) designed a questionnaire on team climate (TKFB) which captures four dimensions: i. vision, ii. task orientation, iii. participating security and iv. support of norms and ideas. This approach also relies on social and task orientation and additionally takes the need for vision, openness and the positive climate into account. These additional aspects should be included when regarding music groups as working groups.

With respect to music groups the criteria from Carron *et al.* (2012) regarding group cohesion definition (coherence of two or more individuals with shared goals and structured interaction, shared perception of group structure and reciprocal interdependency) as well as the criteria from Pescosolido *et al.* (2012) regarding capturing group cohesion (clearly defined contexts and real time interaction) are explicitly met. Prior to applying the concept of group cohesion in the music context Tennstedt (1979) mapped social structures of bands in sociograms with arrows representing sympathy. Other options are to measure the perceived positivity of atmosphere (see King 2006) or measuring band climate via questionnaire (Bullerjahn *et al.* 2015). Lim (2013) shows the dominance of the social

dimension of interpersonal interaction and cohesion over the organisational dimension within the music context. Blank & Davidson (2007) also distinguished between social and organisational and additionally between musical factors of role allocation.

The demands a band chooses to comply can be deduced from the goals and vision the group sets itself – and therefore can be very different. An amateur band might want to present their songs to an audience. Semi-professional musicians may strive towards entering the music market. Working together as a team concerns different areas of interest. The meeting characters substantiate the group's ability to collaborate on a stable, long-lasting and intensive basis. Musical communication and skills should improve with time without generating too large differences due to different developmental velocities. Due to self-management of bands organisational roles arise next to social and musical roles within the group. These naturally mirror existing skills but also preferences and willingness to follow the goals and vision. The above described dimensions of social, musical and organisational are also present in musicological literature – but not yet explicitly articulated and examined. A musical dimension is met by composing and performing. An organisational dimension is met by advertising music and arranging band activities. The social dimension is met by developing and maintaining a positive working atmosphere and friendships. This threefold construct of group cohesion in music groups is implicitly proposed by a number of papers in musicology (Dollase *et al.* 1974; Tennstedt 1979; Niketta *et al.* 1983; Ebbecke & Lüscher 1987; Dyce & O'Connor 1992; Rose 1994; Dyce & Cornell 1996; Blank & Davidson 2007; Halbritter 2012; Bullerjahn *et al.* 2015; for summary see Marx 2017: 146 ff.).

To shed light on the invisible management in small music groups perspectives of social psychology are adopted. The aim is to investigate music groups functioning and how improving this functioning could help to improve teaching in music high schools where group dynamics are until now mostly simply ignored, at least in the last decades in Germany. Grounded on knowledge about the need to investigate social, musical and organisational issues of band functioning group cohesion comes into focus.

Method primary analysis

This study aims at contextualizing identification with the group, atmosphere and group cohesion in semi-professional music groups in popular music to shed light on the idea of “invisible management” in small music groups. To achieve this goal answering how group cohesion can be conceptualized from a musicologist point

of view and explaining the concept for semi-professional bands in the field of popular music is necessary. Five natural – so to say real – bands from Berlin consisting of 20 musicians in total were questioned. This paper is derived from a dissertation looking into the concurrence of expertise, personality, group cohesion and performance differences. The bands have been dealt with as case studies at first. Later on, a numerical approach aims at comparing across the samples. This needs to be regarded as experimental since only five samples are processed but the complexity of the undertaking did not allow for a bigger sample. The bands have been chosen by the criteria of being natural groups, regarding themselves semi-professional and operating in the area of popular music in general – for more information see Marx 2017: 317 ff. Table 1 gives a short overview.

Table 1. Sample

Band 1	Band 2	Band 3	Band 4	Band 5
Progressive Rock: drums, bass, guitarist singer	Elektro Rock: drums, bass, guitar and singer	Groove Rock: drums, bass, guitar and guitarist singer	Stoner & Emo Rock: drums, bass, guitar, female singer	Latino Pop: drums, bass, guitar, guitarist singer, female singer

Source: own elaboration.

A semi-structured questionnaire guide was developed to broach the issues of group identification, group cohesion and role allocation within each band. The musicians were questioned about song genesis, musical and organisational roles and competences as well as expertise in popular music (for questionnaire see Marx 2017: 155). All 20 interviews were transcribed using TIQ (talk in qualitative research, Przyborski & Wohlrab-Sahr 2010) and processed via directed content analysis (Hsiu-Fang & Shannon 2005). The content analysis was conducted by using an open approach to enable an unknown number of categories to emerge.

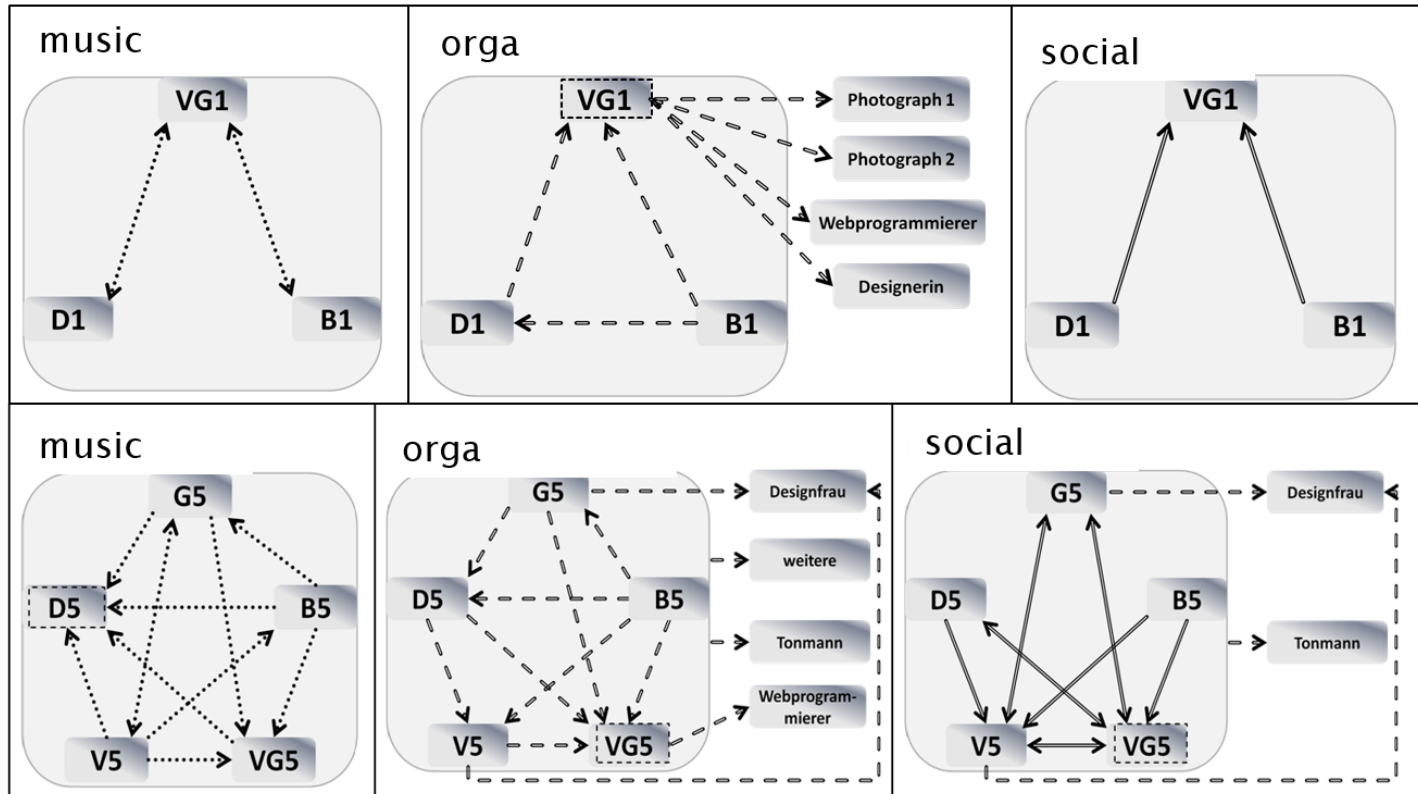
In a primary analysis the results were visualized in sociograms: In separate interviews with band members each nomination of a musician as for example songwriter (musical dimension), booker (organisational dimension) or mediator (social dimension) generates an arrow in a band's sociogram. Multiple nominations in this procedure did not generate more than one arrow with the same meaning since this would be redundant information. Designated leaders are marked separately. Arrows for negative nominations are not included because they were not verbalised by the musicians.

Results primary analysis

From the directed content analysis emerged three categories and therefore confirm results from literature research. The musician's statements on the bands workflows were assigned either to the social dimension, the musical dimension or the organisational dimension of group cohesion. One striking result is the impression that when talking with musicians about their bands it seems to be the most important thing to them in the world. That may be the reason for the category music to have the most sub categories (for subcategory list see Marx 2017: 162). Also striking is songwriters never discrediting the musical skills and abilities of their fellow musicians which may be part of a musical leadership skillset.

For the ongoing research approach the emerged construct of group cohesion in small music groups comprising the dimensions musical, organisational and social is abbreviated with MOS. Figure 1 shows the MOS sociogram of band 1 and band 5 as examples for the effectiveness of visualisation and clear differences in group cohesion between bands. Musical dimension arrows were entered for song writing, rehearsal leading and musical competencies. Organisational dimension arrows were entered for dealing with relevant tasks, responsibility planning and controlling. Social dimension arrows were entered for friendship outside of rehearsals and actively generating a positive working atmosphere.

It becomes obvious that almost all interaction within band 1 is directed towards VG1 (for abbreviations see figure 1) who is clearly in charge in every respect within the band and towards outside collaborators (photographers, web-master, designer). In comparison band 5 shows connections from and towards all band members except the bass player who in his interview pointed out to be the last new member just recently joining the group. Interestingly connections to outside collaborators (designer, sound engineer, web master, others) are mostly not assigned to one musician but to the whole group and do not only occur in the organisational dimension.



Legend: V = vocalist, G = guitarist, B = bassist, D = drummer; arrows represent positive nominations from interviews

Figure 1. MOS Sociograms of band 1 and band 5

Source: own study.

Table 2. Summarised findings of primary analysis of interviews via sociograms

	Musical	Organisational	Social
Band 1	centred around VG1	centred around VG1	centred around VG1
Band 2	centred around G2	centred around D2	friendship
Band 3	mutual recognition	fair allocation of duties	little social bond
Band 4	mutual recognition	centred around V4	little social bond
Band 5	mutual recognition	centred around VG5	friendship

Source: own elaboration.

This way sociograms are a very potent tool for describing the condition of music groups: In Table 2 the most striking findings are summarised for all five bands. Altogether the interpretation as presented here cannot only be derived from sociograms but is also informed from key findings from the interviews. For example, the more younger musicians named wishes like “I want a record deal” or “I want to make my living from music” while the more advanced musicians simply wished to continue playing live gigs. This confirms results from Bullerjahn *et al.* (2015) where team-success-orientation correlated negative with age.

Method secondary analysis

In a secondary analysis the interviews were transformed into numerical data by using the Music Group Cohesion Inventory for Experts (MGCI^{experts}) which was developed for this purpose. In this, psychological tools have been applied in a selective intermixed manner as part of an original methodology develop by the author. The MGCI^{experts} comprises items from the GEQ (Group Environment Questionnaire, see above), the TKFB (Teamklimafragebogen, see above) and the BKFB (Bandklimafragebogen, see above) along the MOS model (see table 3). The original research was conducted in German language – detailed information on the items are not listed here (for more information see Marx 2017: 160). Results from each dimension have been validated through interview statements.

Table 3. MGCI^{experts}

Dimension	MGCI^{experts} scale-composition	Numerics
M (music)	GI-M (1 Item) & TEAM-M (4 Items averaged)	2x5-points
O (orga)	GI-O (1 Item) & TEAM-O (4 Items averaged)	2x5-points
S (social)	GI-S (1 Item) & BKFB-BK (1 Item)	2x5-points

Source: own elaboration.

The inventory is conceptualised for the use with experts, hence the name MGCI^{experts}. Handling the items requires prior knowledge and in a questionnaire for musicians the content would be distributed along much more items. For comparable representation purposes of results one scale for each MOS dimension was build (for assignment of scales see Marx 2017: 160).

Additionally, each musician's identification with his or her band was measured using the IIS (Inclusion of Ingroup in the Self, Tropp & Wright 2001). The IIS inventory captures identification with a group using a seven-point graphical scale which measures overlap of the self with a group analogical to Likert scales. Furthermore, each musician was questioned with seven-point Likert scales about the atmosphere in the bands workflow along six typical conditions: 1) composing together 2) arranging together and 3) rehearsing pieces, 4) immediately prior to a gig 5) on stage and 6) immediately after being on stage. These measures are felt mean estimates and some musicians were overcharged by generalizing. The process of IIS and atmosphere data collection was part of the interviews.

In the end the data was triangulated to generate insights into the social processes of the bands lives and workflows. Sociograms and MGCI^{experts} values come from the same data source – the interviews – but follow different analysis methods – a mixed method approach (Schreier *et al.* 2010). Identification and atmosphere add to the picture. Using several methods within one study set up may also be triangulation (Flick 2008). The following list shows the order of all steps of the method including primary and secondary analysis:

1. transkription of interviews
2. directed content analysis (primary analysis)
3. generating MOS-sociograms (primary analysis)
4. calculation of group cohesion with MGCI^{experts} (secondary analysis)
5. calculation of identification values from IIS (secondary analysis)
6. calculation of subjective atmosphere values (secondary analysis)
7. triangulation of results

Results secondary analysis

Identification of musicians with their bands (IIS) show overall high values (see fig. 3). The atmosphere separated into rehearsal room atmosphere (composing, arranging, rehearsing) and gig atmosphere (before, on and after stage) broken down for musical roles shows differences for singers who seem to feel more comfortable on stage than other musicians (see fig. 3).

The secondary analysis was conducted using the MGCI^{expert}, results are summarised in figure 2. The numerical approach provides another point of view

completing the picture. For all bands the musical dimension shows the highest values which is not surprising given the fact that they are musical driven groups in the first place. Band 1 shows a high value for musical cohesion in contrast to social and organisational. From the interviews it becomes clear that VG1 is trying to control and deal with everything himself leading to organisational group cohesion below standard deviation of all groups. Analog results show for band 3 here with musical group cohesion below standard deviation. In his interview G3 mentioned thoughts about leaving the group because of musical differences. Both groups (band 1, band 3) clearly show less group cohesion in total than the other bands (see fig. 3, middle). Worth mentioning is furthermore the social dimension surmounting musical and organisational dimensions only in band 5. This group decided against a record deal to preserve the friendship basis of their conjoint musical endeavour.

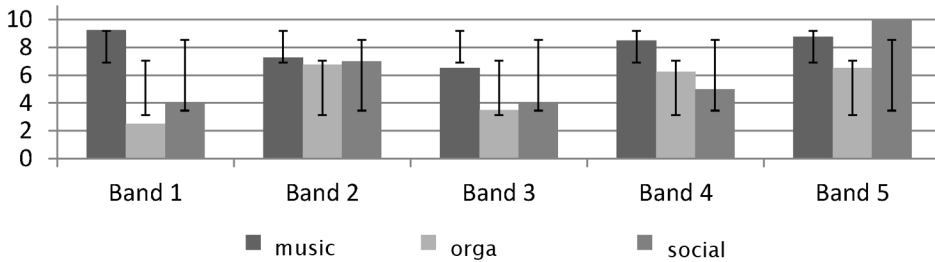


Figure 2. Results from the MGCI^{experts}, black bars display standard deviation of all bands

Source: own elaboration.

Piling up results of all three dimensions of the MGCI^{expert} shows total values (sum of all three dimensions) for group cohesion. Since musical group cohesion is high in all bands it is organisational and social group cohesion accounting for high sums in the MOS-model (see fig. 3, middle). Extra-musical goals which induce organisation and task allocation lead to more group cohesion, since more communication is taking place.

Finally, the triangulation with identification and atmosphere shed yet more light on the group cohesion condition of bands. Comparing the musical dimension values of MGCI^{experts} with values of identification obtained via IIS the numbers show a very similar progression. The musicians of the sample identify with the musical work that is done in their bands the most. It seems identification is mirrored in the musical dimension and vice versa. Higher totals of MGCI^{experts} values correspond with better atmosphere values in gig situations. In other words: Bands seldom leaving their rehearsal room show less cohesion probably due to less conjoint extra-musical experiences.

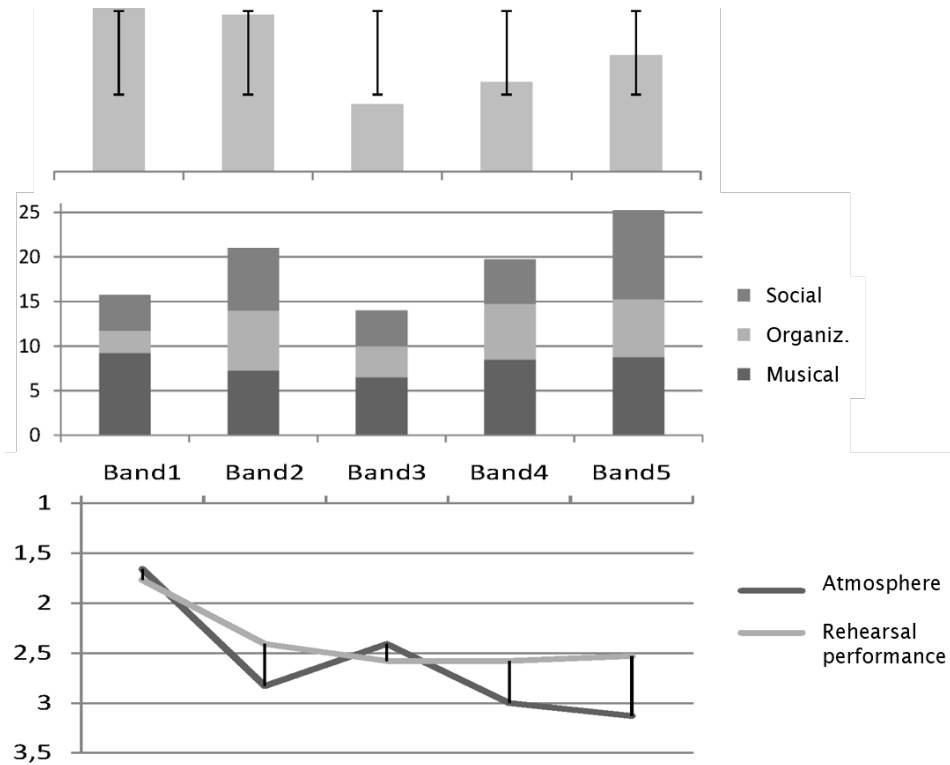


Figure 3. Triangulation: Mean identification per group measured with the IIS (top); group cohesion measures via totals of MGCI^{expert} (middle) and atmosphere (bottom)

Source: own elaboration.

Discussion

The paper attempts to prove the usability of the methodological triangulation of sociometry, psychological tests, and qualitative interviews in the analysis of music groups' cohesion and provides valid information on the cohesiveness of the five researched groups with respect to the different dimensions of group cohesion. But what does it all mean? In the light of the question for invisible management of music groups the conducted research led to the question of group cohesion in the special context of small music groups. The ability to measure group cohesion helps to understand why bands seem to be able to follow their goals easily and free of conflict compared to other working groups.

The case studies make clear that the social construction of every band is different, yet what connects them is a sophisticated role allocation allowing each musician freedom of action in one or another way. Whether there are three or five

musicians forming a group there will always be enough different roles to choose from to construct a complex band personality without the danger of colliding with team members. One musician may be socially introvert and less present and at the same time be in charge for musically harmonic solutions and web design. But this freedom may be limited to bands in the stage of semi-professionalism.

The results do not allow for a typology which would require more bands in the sample. Socially driven bands remain in the rehearsal room and on the amateur level. Semi-professional bands have shown to enhance group cohesion by adding an organisational role allocation layer to the existing social and musical layers. This insight might help musicians-to-be handling their career – characterized by working with groups if not a solo artist. Therefore, a music psychology informed training of intra-group processes should be of interest for music high school students and teachers alike.

The fact that group composition determines the altitude of a bands performance opens more questions. How do personality constellations come into play? What composition of musical and extra-musical skills is a good one for music groups striving to enter the music market? How does musical expertise and differences between musical skills in bands complement the picture? And does high group cohesion always produce best group performances especially in the domain of joint music making?

This leads to the more far going question: What can other working groups learn from music groups? For this it would be necessary to test the threefold MOS concept of group cohesion in different contexts. For instance, a radio station team could be interviewed with the underlying assumption of assessing a social, an organisational and the radio-specific task dimension of generating an interesting radio program every day. But transfers like these are risky since the condition of free volition membership is seldom to be found. Staying in the domain of performing arts a transfer to theatre members or back to sports would certainly be interesting. Arguing from another point of view one could assume self-composed groups sharing a goal will always develop higher group cohesion.

Also, it needs to be considered that high level of group cohesion does not necessarily bring positive results for a group. Under certain conditions, such as an intra-group conflict, high group cohesion can be destructive. In this respect Butterworth (1990) points at static group composition possibly leading to the incapability of not being able to respond with flexibility to changes of group members or from outside the group. This may be one reason why many bands dissolve after a few years no matter how professional they have become. The pressure to follow goals and visions may suppress individual developments.

The fact that average identification of musicians with their bands corresponds with the musical dimension of group cohesion only leads to the assumption that

on one hand music making itself provides an ideal framework for optimized work flow and on the other hand breakups of bands may be rather grounded in differing musical developments of musicians than in the too high group cohesion in threatening situations – another interesting question.

Summary and outlook

The presented study investigated group cohesion for the special area of small self-organised music groups in popular music – so called bands. A summary of the results provides six points:

1. Theory from psychology and musicology proposes three dimensions of group cohesion: musical – organisational – social.
2. MOS-sociograms give a comprehensive picture of a bands group cohesion.
3. The MGCI^{expert} allows to build numerical data on the MOS-Model.
4. The musical dimension of group cohesion seems to be correlated with musician's identification with their bands.
5. Organisational and social dimensions of group cohesion account for high sums of overall cohesion and seem to be connected with better atmospheres in performance situations.
6. The semi-professional band context seems to provide an ideal framework for invisible management and optimal group functioning to emerge.

A primary analysis realised visualization of musical, organisational and social dimensions of group cohesion for the context of small popular music groups. Arrows in sociograms representing acknowledgement of musical competences, organisational performances and friendship enable assessment of group cohesion: Do groups rely on single persons or share role allocation? Do groups show high cohesion or does low cohesion point towards decay?

In a secondary analysis the framework of the MGCI^{experts} enables transformation of the interviews into numerical data representing the visual results quite close. The numerical analysis shows the musical dimension to reach higher values than the social dimension in four of five groups, the organisational dimension seems to be of even less importance. Dominance of the musical dimension of group cohesion was already discussed by Murnigham *et al.* (1991) and Lim (2013). Interestingly, bands showing higher organisational cohesion values also show higher overall group cohesion. The exception in the present sample is band 5 with a conscious decision for friendship over striving for success. Positive effects of the social dimension on overall group cohesion as described in psychological literature cannot be confirmed for music groups here.

The average identification of musicians with their bands corresponds with musical dimension of group cohesion, and not with social or organisational dimensions. Bands with high overall group cohesion show more positive atmosphere in concert settings mainly perceived by vocalists and songwriters, lower group cohesion values point towards better atmosphere in the shelter of rehearsal rooms. This all boils down to the musical dimension being the best predictor for overall group cohesion, the organisational dimension enhancing overall group cohesion and the social dimension being able to counteract goals.

In summary it seems for music groups to endeavour in extra-musical tasks and goals heightening the overall group cohesion. Once the shared musical goal is set bands ought to leave the rehearsal room and make joint experiences to build up the basis for long-term group cohesion.

Qualitative analysis of the interviews using sociograms proves itself useful. Numerical analysis of the interviews using the MGCI^{experts} show similar results and seems to be a qualified method for providing data for triangulation. In addition, numerical analysis enables deeper insight showing the organisational dimension of group cohesion being a predictor of overall group cohesion in music groups. This also advises against using a cohesion mean value but pointing out the different dimensions separately.

The presented threefold concept of cohesion can be used to describe all kinds of small groups acting as team. Whatever the task can substitute musical cohesion. The next step would be to improve the MGCI for the use with musicians themselves. Furthermore, following Hackmann (1989) the analysis of viability and its influence on cohesion of music group in long term studies would be enlightening. Also, Greer (2012) notes that cohesion is a dynamic process and that its development through time still needs to be researched. Following Chong (2005) the same applies for role allocation in groups. Also, in future research group cohesion may be tested on personality constellations, leadership styles or collaboration in music groups (see Marx 2018) to enable further insight into how music groups function from the social psychology perspective.

The generated insights about a) organisational activities enhancing group cohesion and b) the possibility to choose from a wide range of role allocations from different dimensions and c) the dominance of the musical over the social dimension of group cohesion are recommended to be incorporated into music high school curricula. The transformation of the MOS-model into domains inside but also outside the performing arts need to be tested in future research.

In general, the knowledge about general concepts of group cohesion need to be transferred into further research and into practice. It is very desirable that a text like this will find its way into teaching, or music-making practice even when of methodological complexity. The gap needs to be filled by those reading and teaching: the lecturers.

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