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# Radio Research Methods

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In general, academic and scientific research on radio needs the same arsenal of standard methods as, for example, research on television. Aside from different qualitative media study approaches like, for example, *case studies*, communication scholars use primarily systematic qualitative and quantitative *content analyses* to describe and compare radio programs in terms of their program structure/schema and their mix of program elements (news, music, talk, feature/magazine, traffic service, advertising/promotion), specifically their music mix (mainstream/chart oriented, rock oriented, dance oriented, urban oriented, country oriented, classic hits/oldies oriented, jazz oriented, Spanish/Latino oriented, religious/gospel oriented). Moreover, they rely on *surveys* and *questionnaires* to explore motives for radio listening, to ask for expectations and evaluations about people's favorite radio program or relevant set of radio programs, and to measure the meaning and relevance of radio use in daily life (in comparison with other mass and social media). Finally, they design and conduct different *experimental and non-experimental reception studies* to investigate the gratifications and effects of radio listening.

One example of a *non-experimental* approach is the *experience sampling method*: Recipients are asked to wear a pager for some days and to document their current radio use and the effects of this use every time the pager random alerts them. In this way, researchers are able to collect a representative sample of individual experiences with radio content and to ask for effects of those experiences directly at the moment of being exposed to the content. By means of experience sampling, Sloboda, O'Neill, and Ivaldi (2001) collected data about the use and effects of radio's most popular content: the music. They measured music's effects on the dimensions of "positivity," "present-mindedness," and "arousal." For example, in the category "positivity" their subjects reported changes from "sad" to "happy," from "insecure" to "secure," or from "tense" to "relaxed." In the category "present-mindedness" they reported changes from "bored" to "interested," from "detached" to "involved," or from "nostalgic" to "in the present"; in the category "arousal," from "tired" to "energetic" or from "drowsy" to "alert."

Examples for *experimental reception studies* are settings in which variations of elements of radio programs are created in a systematic and controlled manner (experimental conditions) to measure the isolated impact of this element on, for example, the overall liking of a program or the recall of elements of the program's content (e.g., Dillman Carpentier, 2010; Ruth, Spangardt, & Schramm, 2016; Spangardt, Ruth, & Schramm, 2016). In doing this, communication researchers are focused on the influence of specific music variables (like the degree of complexity, familiarity,

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saturation), host/presenter variables (like gender, competence, flexibility, sociability, idiom), or promotion/branding variables (like density and salience of audio logos, trailers, naming of sponsorship).

### Radio-specific methods

To document people's exposure to radio in the individual course of a day and a week, communication scholars and especially consumer research companies like Nielsen Audio (formerly Arbitron) usually use seven-day paper *diaries*: People are asked to document their radio listening habits by reporting for every quarter hour (a) if they are listening to a radio station, (b) to which radio station they are listening, and (c) with whom they are listening. Research companies like Nielsen Audio aggregate those data to market-specific rankings of radio stations and market them to radio broadcasters, networks, advertisers, and advertising agencies. The central criteria and ratings of those rankings are "cume" (cumulative number of unique listeners over a period), "AQH" (average number of people listening in a given 15-minute period), and "TSL" (time spent listening).

An alternative and complementary option of collecting these kind of data are *portable electronic devices* like pagers, mobile apps, or radio watches that are able to gather and identify acoustic signals of radio programs via audio-matching up to three times a minute (Arbitron, now Nielsen Audio, has used the Portable People Meter—PPM—since 2007 after GfK Switzerland introduced the Mediawatch in 2001). As these devices automatically assign the program (to which the user is currently exposed to) to the right radio station, the measurement and ratings are considered to be highly reliable. Moreover, recall and recognition biases that are typical for the diary method can be completely eliminated.

Music is the dominant part of most radio programs, and listening to music is the most important motive for most people to switch on the radio. Therefore, managers, music editors, and other key deciders of the radio industry rely more and more on data gathered by highly standardized *music testing* (Fletcher, 1987; Haas, Frigge, & Zimmer, 1991; Schramm, Petersen, Rütter, & Vorderer, 2002). Because of individual differences in abilities and capacities in the reception and perception of music, it is very difficult to develop radio programs which will be favorably evaluated and used constantly by a large group of people. In order to create music programs compatible with large groups of people, the degree of complexity of radio music must remain rather low (Barnes, 1989; Ahlqvist & Fisher, 2000); not surprisingly, music research conducted by specialized consumer research companies (like Coleman Insights) remains rather simple (Schramm & Knoll, 2012). Within this music research two kinds of tests stand out: telephone polls, named "callouts," and audience/auditorium tests.

*Callouts* are the faster and more favorable method and are preferred by most radio stations. Every week or at least every two weeks 30 to 50 music titles in the form of hooks (salient excerpts from a title with a length of approximately eight to 12 seconds and with the highest presumed recognition value, most often from the refrain) are played over the phone to approximately 100–200 people randomly selected from the

target group (Schramm et al., 2002). The people judge every title along several criteria. As a rule, these involve three aspects: familiarity (“Have you heard this title before?”), pleasure (“How do you like this title?”), and saturation (“Would you like to hear this music title on your favorite radio program more often?”). In the case of saturation (or “burnout”), listeners are being indirectly asked whether they hear these titles too often. In callouts, the test titles are those which receive very frequent radio play, and therefore have a high rotation rate—in other words, where saturation tendencies are more likely to occur. According to Haas et al. (1991, p. 323), callouts have the advantages of quickly gauging the mood changes of listeners and of continuously observing music title developments over short intervals. Accordingly, programmers can include or exclude titles with certain characteristic values of current interest from their playlists. Off and on, radio researchers ask additional questions that go beyond the three above-mentioned criteria; for example, they inquire about station affinity (to which radio station does the title fit?), emotional expression of the music, or the desired time of the day during which the music should be played. Afterwards, the researchers compile the results from the three criteria—familiarity, pleasure, and saturation—in a so-called Power Score and, through combination with sociodemographic media use data, use them to create target-group-specific title indexes that indicate which title is preferred by which people (Schramm et al., 2002). Enriched with additional information about various music parameters such as music genre, tempo, instrumentation, gender of the performer, lead-in time to the beginning of singing, title length, the way the title ends (cold = abrupt end, cold fade/quick = quick fade-out, fade = slow fade-out), and the desired rotation, the data are fed into the data banks; using these, special computer programs such as Selector compute music programming lists targeting a specific group of listeners (Münch, 1998). Subsequently a music editor has to revise these lists in ways that guarantee a harmonious music program reflecting the philosophy of the radio station. One can assume that most radio stations would rather offer music programs at the lowest common complexity level and risk boring the audience than overtax and possibly lose them. Because of the fact that “activation” diminishes when people listen to a series of titles with a similar complexity level, music editors take certain tonal-structural contrasts between the titles into account when putting together radio programs, specifically changes between fast, more activating, and slow, more calming titles (MacFarland, 1997). A radio program can be diversified by changes between music genres, as far as the format allows (for example, switching between pop, rock, soul, rhythm and blues, hip hop), female and male singers, pure instrumental and vocal, fast/activating and slow/calming songs, old and new songs, text languages, well-known and unknown songs, and changes in the song’s mood, for example changes between happy and sad songs.

*Audience or auditorium tests* cost more and, for this reason, radio stations fund them only once or twice a year. For these, they recruit a group of up to 300 persons—in most cases reflecting the sociodemographic composition of the target group—and invite them to a large auditorium like a movie theater or hotel hall. There they listen to hundreds of music titles in the form of hooks and evaluate them according to the criteria mentioned above (Schramm et al., 2002). The group hears the title either together on a stereo set—here mutual distractions and possible group behavior limit the validity of the data—or they listen to the titles in an individual random sequence

through headphones. In the former case sequence effects are neutralized by playing the titles in reverse order (the mirror image method) to a second group of the same size. Such audience tests work well in testing large parts of the playlist as well as those titles that do not appear on the highest rotation. According to Haas and colleagues (1991, pp. 323–324) these tests also have the advantage of generating a great amount of data in a short time and improving the sound quality of the hooks, or, if headphones are used, to optimize that sound quality, as compared to callouts.

Besides these two main methods, some radio stations use alternative music tests from time to time. These include *qualitative methods* (for example, discussions with *focus groups* to deeper explore more unconscious or complex motives, habits, and attitudes of the listeners), *call-in surveys* (listeners can call a station to listen to and evaluate a selection of hooks), *paper questionnaires* (listeners receive questionnaires with a listing of titles and artists, which they must categorize and evaluate without actually hearing the music; only used by radio stations with very old listeners who are not used to online questionnaires/polls), *studio tests* (listeners are invited to the radio station's studio, where they can repeatedly listen to different selections of hooks before evaluating them; often in combination with focus groups), and different options of online feedback via the stations' homepages and social media platforms (evaluations of titles of the playlist, which is the online version of the call-in; possibility for the listeners to request their favorite songs that are still not part of the playlist; live feedback to the current program). Although the variety of these alternative methods and sources seems to be promising and fruitful at first glance, radio stations have to be careful with drawing the right conclusions and decisions from this data, because in most cases the listeners decide by themselves to be part of the focus group, to take part in a call-in, or to give some feedback online via the station's homepage; this is, most samples are self-selected and motivationally biased and therefore not representative of the whole target group of the station (but often a good sample of the station's hardcore fans).

Finally, a very special case of music testing is the so-called *mapping study* that is used by radio start-ups or in cases of repositioning or relaunching established radio stations (Meyer, 2007). Mapping studies test up to 50 music genres, each represented by three titles/hooks, to gather data about compatible music preferences of the listeners of a well-defined radio market (Schramm et al., 2002). Listeners are not only asked to rate different music genres; they are also asked to allocate—if possible—music genres to existing radio stations of that market. The central aim of most mapping studies is to identify noteworthy and profitable groups/cluster of listeners with distinct patterns of music preferences and to detect at least one of these cluster to be not (perfectly) picked up/addressed by existing radio music compositions of that market. In other words, mapping studies generally try to find a market niche. Even radio stations that do not intend to reposition or relaunch their program rely on data from mapping studies to observe their fast-changing radio markets and to prepare for potential future repositioning actions. From a psychological point of view, mapping studies are especially interesting as they map the structure of a radio market not on the basis of the radio stations' self-conception and self-perception or on the basis of objective content analyses (cf. Wolling & Fütting, 2007, for a content analysis of seven radio stations in three markets), but on the basis of the listeners' subjective perceptions (Meyer, 2007).

Results of mapping studies are not visualizations of the real radio landscape with its agglomerations (market mainstream) and its sparsely populated areas (market niches), but visualizations of the perceived radio landscape. Thus, an Adult Contemporary (AC) radio station that actually plays a well-balanced mix of pop and rock from the nineties and the noughties (2000–2009) as well as from the current charts could be perceived by the listeners as being strongly focused on hits from the nineties. As a consequence of this, another AC radio station that is looking for its market niche or rather its unique selling point could decide to either promote its music mix to be the one and only well-balanced mix, or to focus its music mix on songs from the last 15 years and to disregard songs from the nineties.

### **Importance and evaluation of music testing**

With regard to differences between commercial versus public service broadcasting stations, Neuwöhner (1998) points out that both use similar methods but that commercial stations can limit themselves to the so-called “acceptance research” (what the listeners like), while public service broadcasting stations must keep track of other variables as well and need these data in order to provide decision-making information to those responsible for the programs on culture and information; these instances require a more differentiated spectrum of methods.

Sources about the importance of music testing for American commercial radio stations, as well as the influence of various factors (results from music testing, attitude of music editors, charts, requests of listeners, promotion of record labels) on the music programming of these stations, are few and far between. Heller (1999) compared results from callout research of top 30 songs and their published radio station playlists to compute favorability scores for the music the stations played. Then, he correlated these scores with the Arbitron ratings of the stations and found statistically significant correlations between callout research scores and Arbitron ratings, which supports the assumption of most stations that music testing helps to enhance the attraction of music programs for large groups of people.

For the German market, we are able to refer to two representative surveys (Schramm & Knoll, 2012; Schramm et al., 2002) exploring the music testing activities of German radio stations and the meaning of music testing for the creation of music programs. According to the latest study, music editors of German radio stations consider results from music testing to be the most important source to create their daily music program, followed by their own expertise relating to their estimations/ratings of songs. Public service broadcasting stations still see the expertise of their music editors as a bit more important than the results from music testing, maybe because they employ normally more music editors than commercial stations and consequently have to justify their editorial staff investment. Some other interesting differences between the two systems can be observed with respect to the importance of online feedback and the importance of iTunes charts: Both sources are being rated significantly higher by commercial stations compared to public service broadcasting stations, indicating that commercial

stations adapt to new and interactive sources earlier than noncommercial stations (Schramm & Knoll, 2012).

Taking into account how simple and methodologically dubious standard music testing can be, radio stations would be assumed to consider music testing to be an important, but not a very reliable source. This is not true: Most stations, commercial as well as public/noncommercial, are very convinced of the usefulness, reliability, and appropriateness of these simple music testing methods and consequently regard the price for that research as being absolutely adequate (Schramm & Knoll, 2012). However, if the radio industry doesn't question and challenge those methods, it is not surprising that the consumer research industry keeps its methodological standard arsenal of music testing—that is, callouts and audience tests—with its standard arsenal of items. To conclude, music testing has not been essentially modified since the 1980s, but from the perspective of radio stations and consumer research companies there is no good reason to do so as long as the music testing system works. Both know that the methods could be more complex (by, for example, including more items) and valid (by, for example, testing complete songs instead of hooks and gathering data in real day-to-day radio listening situations instead of artificial situations in which people are forced to rate hooks via the telephone or in a movie theater), but music testing has to be fast and affordable—in one word: functional. Nevertheless, consumer research companies as well as communication researchers should be interested in further development and improvement of music testing methods—the former to generate more valid results that enable better consulting of their customers (i.e., the radio stations); the latter to provide a better measurement of radio music perception and thus to contribute to a better understanding and explanation of daily exposure to radio, which is still one of the most prevalent habits of people in the Western world.

SEE ALSO: Case Study Research; Cluster Analysis; Communication Focus Groups; Content Analysis, Qualitative; Content Analysis, Quantitative; Evaluation Research; Experimental Design; Interview Methods, Quantitative; Measurement of Media Exposure; Mobile Experience Sampling Method (MESM); Online Research Methods, Qualitative; Online Research Methods, Quantitative; Reliability; Research Method Selection; Sampling, Online; Sampling, Random; Standardization; Survey Methods, Online; Survey Methods, Traditional, Public Opinion Polling; Visual Presentation of Data

## References

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- Ahlkvist, J. A., & Fisher, G. (2000). And the hits just keep on coming: Music programming standardization in commercial radio. *Poetics*, 27, 301–325. doi:10.1016/S0304-422X(00)00007-3
- Barnes, K. (1989). Top 40 radio: A fragment of the imagination. In S. Frith (Ed.), *Facing the music* (pp. 8–50). New York: Pantheon.
- Dillman Carpentier, F. R. (2010). Innovating radio news: Effects of background music complexity on processing and enjoyment. *Journal of Radio & Audio Media*, 17, 63–81. doi:10.1080/19376521003719375
- Fletcher, J. E. (1987). *Music and program research*. Washington, DC: National Association of Broadcasters.

- Haas, M. H., Frigge, U., & Zimmer, G. (1991). *Radio Management. Ein Handbuch für Radio-Journalisten* [Radio management. A handbook for radio journalists]. Munich: Ölschläger.
- Heller, G. (1999). The association between music research and CHR radio stations' Arbitron ratings. *Journal of Radio Studies*, 6(2), 246–269. doi:10.1080/19376529909391726
- MacFarland, D. T. (1997). *Future radio programming strategies: Cultivating listenership in the digital age*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Meyer, J.-U. (2007). *Radio-Strategie* [Radio strategy]. Constance: UVK.
- Münch, T. (1998). 24 Stunden in 3 Minuten? Computergestützte Musikprogrammerstellung im Radio der 90er Jahre [24 hours in 3 minutes? Computer-based programming of radio music in the 90s]. In B. Enders & N. Knolle (Eds.), *Neue Musiktechnologien III* (pp. 399–414). Mainz: Schott.
- Neuwöhner, U. (1998). Musikstudie oder Titeltest: Methoden der Musikforschung [Music study or music title test: Methods of music research]. In C. Lindner-Braun (Ed.), *Radioforschung: Konzepte, Instrumente und Ergebnisse aus der Praxis* (pp. 153–174). Opladen: Westdeutscher Verlag.
- Ruth, N., Spangardt, B., & Schramm, H. (2016). Alternative music playlists on the radio. Flow experience and appraisal during the reception of music radio programs. *Musicae Scientiae*. Advance online publication. doi:10.1177/1029864916642623
- Schramm, H., & Knoll, J. (2012). Wandel der Musikprogrammierung im Radio? Stand und Stellenwert der Musikforschung bei deutschen Radiosendern 2011 [Change of radio music programming? Status and relevance of music tests in German radio stations 2011]. *Medien & Kommunikationswissenschaft*, 60, 561–576. doi:10.5771/1615-634x-2012-4-561
- Schramm, H., Petersen, S., Rütter, K., & Vorderer, P. (2002). Wie kommt die Musik ins Radio? Stand und Stellenwert der Musikforschung bei deutschen Radiosendern [How does music get on the radio? Status and significance of music tests in German radio stations]. *Medien & Kommunikationswissenschaft*, 50, 227–246. doi:10.5771/1615-634x-2002-2-227
- Sloboda, J. A., O'Neill, S. A., & Ivaldi, A. (2001). Functions of music in everyday life: An exploratory study using the experience sampling method. *Musicae Scientiae*, 5, 9–32. doi:10.1177/102986490100500102
- Spangardt, B., Ruth, N., & Schramm, H. (2016). "... and please visit our Facebook page, too!" How radio presenter personalities influence listeners' interactions with radio stations. *Journal of Radio & Audio Media*, 23, 68–94. doi:10.1080/19376529.2016.1155710
- Wolling, J., & Fütting, A. (2007). Musik im Radio zwischen Mainstream und Profil [Radio music programming between mainstream and profile]. *Medien & Kommunikationswissenschaft*, 55 (special issue on "Music and media"), 62–77. doi:10.5771/9783845202563-61

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