

THE ROLE OF MUSIC AT MANUFACTURING ORGANIZATIONS: AN EXAMPLE FROM TURKISH TEXTILE INDUSTRY

Bengi Baraz Çınar

Anadolu University, School of Music and Drama

Eskişehir/Turkey

E-mail: cbbaraz@anadolu.edu.tr

Ozan Ağlargöz

Anadolu University, Faculty of Economics and Administrative Sciences

Eskişehir/Turkey

E-mail: ozanaglargoz@anadolu.edu.tr

Abstract

We are all living in the soundscape of our environment. We listen to and/or exposed to music in many instances. This particular study focuses on music at work from the perspectives of blue-collar workers and tries to investigate their attitudes towards various functions of music. A quantitative survey was conducted on production workers of a textile firm located in Eskişehir, Turkey. Analysis revealed that music is an important mood regulating aspect of modern factory floors which has important positive benefits on employees' well-being. Selection of music genre and the choice of broadcasting medium are done randomly. Employees are not allowed to create their own soundscapes which we found to be a limiting factor on realizing the merits of music at work. Context specific scale development and proactive planning of music at work are suggested as theoretical and practical outcomes of the study respectively.

Key Words: *Music at work, Blue-collar workers, Well-being*

JEL Classification: M1 (Business Administration)

1. INTRODUCTION

Throughout the history, music was used in many ways and for different purposes. During the 16th Century, music was used to cure mental illnesses at the *darüşiffa*-a hospital annexed to Beyazid II Külliye located in Edirne, Turkey (Complex of Sultan Beyzaid, II Health Museum, Trakya University). Today, Members of the

Turkish National Assembly are creating charivari by hitting the desks and thus composing a very “rough music” in order to protest what they do not like to hear. Music is also being used in order to motivate athletes and fans during the sports events. *Bando ESES*, the official band of Eskisehirspor Football Club combating in Turkish Super Football League is a very colorful example of this kind. Many shopping malls and other elements of urban life use background music in order to create a more pleasant experience for consumers. Some innovative people in Stockholm, Sweden transformed an ordinary metro staircase into a piano-look alike, sounding staircase so that more people will opt for the stairs instead of the elevator (The Fun Theory). Their results were extremely positive! Or unfortunately, we are all exposed to muzak while waiting on the line of the call center whether we like it or not.

Examples for music in our daily life are many; therefore music at work is an important academic niche area of interest for researchers who study the functions of music in daily life. Research focusing on music at work is rich and diversified but limited (Prichard, Korczynski and Elmes, 2007: 4). Previous studies on music at work generally investigated the relation between music’s mood regulating functions and its effects on productivity (Uhr-Brock, 1961; Wokum, 1969). On the other hand, recent trend of music at work research mainly interested in self-selected music and investigates this phenomenon in office-based settings (Haake, 2010). The current study can be viewed as a step towards bridging the previous body of research with the recent trends in which we tried to understand the general situation of music on the factory floor and blue-collar workers’ attitudes towards the various functions of music at work.

2. REVIEW OF THE RELEVANT LITERATURE

Within the context of management and organization literature, there seems to be four different streams of research where music and music industry are used (Prichard, Korczynski and Elmes, 2007).

In the first stream, researchers focus on the functions of recorded music in the workplace settings. For instance Korczynski, Robertson, Pickering and Jones examined functions of music at work from women’ perspective during the Second World War and found that music both in the form of public broadcasting and chorus singing creates community consciousness among blue-collar workers and also music provides an important way of disdaining from the monotonous factory life (2005). Korczynski and Jones (2006) take the special case of BBC’s *Music*

While You Work radio program which was first aired in 1940s and then became the soundtrack of factories in England under scrutiny in order to understand the transformation of singing workers to listening workers. Liesuk's (2005) study on software designers revealed that there is a strong relationship between music listening at work and employees' mood, creativity and the duration of time spent on tasks related to software design. In another study also conducted by Korczynski, the relationship between songs nominated by the employees and their meanings were ethnographically examined. Results revealed that music, rather neglected aspect of industrial sociology, can be used as an important tool for understanding individual meaning-making processes of factory workers (2007).

The second stream of research uses musical concepts and metaphors and tries to connect this knowledge to understand various management applications and organizational contexts. Albert and Bell (2002) employed music theory in order to understand the action-time decisions of organizations. Jazz is an important metaphor which has a reputable place among organization scientists. Scholars tried to link improvisational aspect of jazz with organizing and even they gathered special conference session around this notion which they labeled "*The Organization Science Jazz Festival*" (Meyer, Frost and Weick, 1998). Other scholars like Humphreys, Brown and Hatch were also interested in the improvisational notion. They attempted to relate the interpretive skills development process of ethnographers with jazz soloists (2003). Recently musical genres other than jazz are also acquiring scholar's attention. Rap music, for instance, used and discourse composed in the lyrics of Jay-Z's songs interpretively analyzed from the entrepreneurial aspects they hold by Sköld and Rehn (2007). And finally Rhodes (2007) provided an important contemporary critique of work based on rock music samples.

The third literature related to music searches for structural overlapping between music and work. Researchers in this stream treat music as a sociopolitical phenomenon. Theodor Adorno and Jacques Attali are significant actors of this realm. Adorno's perspective provides an important critique of production and consumption of mass culture, including music (2009), whereas Attali views music as an institutional field and tries to highlight and to predict the relations between musical forms and social structures (2005).

The last research stream is composed of literature conducted on the music industry. For instance, Negus (1999) tries to shed light on the journey of rap music from streets to boardrooms as an emerging aspect of mainstream music industry. Anand and Watson use Grammy Awards Ceremonies as a tournament ritual with winners and losers and examine its legitimizing effects on institutional field of music industry (2004).

3. MUSIC at WORK: A HISTORICAL PERSPECTIVE

After providing the general empirical picture of music in relation with management and organization studies, it is now time to zoom-in our attention to the music at work and its historical development. Prichard, Korczynski and Elmes (2007) integrates various academic disciplines such as folklore studies, social history, industrial psychology, sociology and management and put those different perspectives into a historical scale. They present the timeline that music is used in order to regulate work and work-related activities. The timeline posited by those scholars includes four episodic periods namely; preindustrialization, industrialization, Fordist industrialization, and postindustrialization. In the following paragraphs, the uses of music in work-related activities during these four periods will be explained briefly.

During the preindustrialization phase, with the research conducted mostly by social historians and folklorists, music is used in the form of work songs. That was the time when people were singing while they were working. Functions of music were limited to increasing the speed of work and fostering harmony among employees. On the other hand music and work songs were instrumentally used to voice workers' sorrows which otherwise they were not allowed to do so (Prichard, Korczynski and Elmes, 2007: 8-9).

Industrialization was the phase which can be characterized by the rise of machines (Prichard, Korczynski and Elmes, 2007: 9). Since machines were controlling the work activities, work songs became useless. Even in some extreme cases, talking was banned during work in order to reach total silence. Although silence in factory soundscape is sought, there were also controversial ideas claiming that the low level of efficiency might be related to the lack of singing employees during work (Uhrbrock, 1961:12).

1940s was the time of Fordist industrialization and during that period music was reintroduced as the form of publicly broadcast music through loud speakers to increase productivity and to decrease employees' tiredness. Most of the research was conducted by industrial psychologists but the topic generally neglected by industrial sociologists. Music related research on productivity is still provides an important and relatively untapped area and thus creates fruitful research opportunities for music sociologists (Prichard, Korczynski and Elmes, 2007: 9-10).

The last episode is labeled as postindustrialization. During this relatively contemporary phase, the research attention was mainly given to music at service settings and individual music listening habits such as using iPods. Initially, psychologists and marketing behavior scholars were mostly interested in the effects of background music on consumers. The research endeavors was then furthered by putting music in the larger context of experience management. This tendentious consumerist literature was naturally criticized by more skeptical scholars. Another stream of research was mushroomed during this period in which scholars treated music as an aspect of organizational culture and conducted interpretive analysis in order to understand the meaning of music in the form of company songs and corporate anthems (Prichard, Korczynski and Elmes, 2007: 10-12).

4. METHODOLOGY

4. 1. Research Design

During the initial stages of the study, we realized that the potential number of respondents was relatively high and our ability to enter the site of the production was restricted due to efficiency concerns of company owners. Thus conducting a quantitative study apparently became the only way that we can get relevant data. Since the overall aim of this study is to understand the phenomena of music at work and to display employees' attitudes towards various functions of music; an exploratory survey was conducted in order to reach the aforementioned goals of this study.

4. 2. Gathering Data

A questionnaire was designed by the researchers and was composed of three main parts. The first part of the questionnaire includes questions concerning the understanding of music at the researched production facility. The way of listening

to music at work, the choices of radio station, most-liked music genre were questioned with closed-ended questions. In addition, we also investigated who decides what to listen and whether employees are free to use headsets while working. This part of the questionnaire was concluded with gathering basic demographics of the respondents such as age, gender, education and workplace tenure.

The second part of the questionnaire focused on highlighting the attitudes of respondents towards the various functions of music at work. This part was composed of closed-ended attitude questions using 5 point Likert-scale, starting from strongly disagree to strongly agree. We used Haake (2010: 70-71)'s "Themes of Self-Reported Functions of Music Listening in Offices" which were qualitatively extracted from the free-response, open-ended questions as part of a larger study on music at work. The five functions extracted by Haake (2010), namely affect/arousal, managing work-related activities, environment, social interaction, musical interests were found to be covering most of the aspects of music at work. Since we conduct our study on a production facility and our respondents are blue-collar workers, we thought that we had to modify the already existing functions and add more functions that we think plausible for the content and goals of our study. Listening to news, music at the breaks and music while commuting were added as other functions of music at work for this study. We also added an item which is related to the importance of musical genre. The final version of the second part was composed of 21 items related to attitudes towards the functions of music at work.

The last part of the questionnaire included an open-ended question in which we want respondents to express their general views about the phenomena of music at work.

4. 2. Sampling and Analysis

The research was conducted at one of the textile production facility of a large group of companies located in Eskisehir, Turkey. The facility makes production both for export and domestic market. It employs 150 blue-collar workers including supervisors and production is done on serial-bases. OECD uses the term "production workers" interchangeably with "manual workers" and "blue-collar workers" and defines those employees as people who are engaged in "fabrication, assembly and related activities, material handling, warehousing and shipping, maintenance and repair, janitorial and guard services, auxiliary production (such

as power plants), and other services closely related to these activities.” Textile industry was defined as an example of traditional industry in which employment of women is higher and working environment is physically dusty and noisy by Nichols and Suğur (2004). The factory we have conducted our research was seemed to be more developed in terms of physical conditions. The working environment was clean, illumination seemed enough and there was a dominance of music which broadcasted publicly.

The questionnaire was pre-tested with 15 respondents. According to the feedback gathered from the pre-test, relevant wording mistakes were corrected and control items were added. The Cronbach’s alpha for the second part of the questionnaire was calculated as 0.744 ($\alpha = .744$) and all items found to be worthy on retention. The greatest increase in alpha (.087) would come from deleting the item related to listening to news but since it was an important function of listening to music at work from the radio, we decided to retain it. Upon completing the pre-testing phase, the questionnaires were again given to all employees (N=150). Employees fulfilled the questionnaires during their breaks and ample amount of time for this process was provided. A total of 105 questionnaires returned, 6 questionnaires were having fatal errors and consequently 99 (n) questionnaires were found to be valid and thus created the sample and the main data set of our study.

The sample of the current study is coherent with the general labor trends in Turkey. Labor force participation rate (LFPR) for women decreased from 34.3 % to 21.6 % between 1988 and 2008 in Turkey. In spite of this crucial fall, textile sector in Turkey is said to be the largest potential employer for urban women with low level of formal education (TSPO and World Bank, 2009). Our sample consists mostly of women with low or moderate level of education, generally below the age of 35. Workplace tenure statistics shows that there is highly blended workforce in which senior employees working with juniors.

At the very beginning of the analysis, an exploratory factor analysis was conducted in order to find out whether the factorial structure of the questionnaire’s second part was coherent with the Haake (2010)’s modified functions of music. The scale’s Kaiser-Meyer-Olkin (KMO) coefficient is found 0.801 and Barlett Test significance value is found to be .000. But the factor distribution revealed a 5-factor scale that did not match with our initial factorial assumptions. This situation might be caused either by low number of respondents (n= 99), which is regarded as poor sample size for conducting scale development

studies (Comrey and Lee, 1992) or by the use of items which were initially extracted under the context of office-based settings. Consequently, the second part of the questionnaire was analyzed and interpreted using frequencies.

The first part of the questionnaire was descriptively analyzed. The information investigated related to the way of listening to music at work, the situation for the use of headsets, the type of radio station mentioned, and the preferred musical genre were reported and interpreted accordingly. And in case of any relational response found in the third part of the study, it was used as direct quotation in order to create a thorough understanding music at work.

5. FINDINGS

We found that there is a continuous streaming of music from the radio. Employees are exposed to music from the radio whether they like it or not. Employees are not permitted to use headsets which means that they are not allowed to create their own soundscape. Individualized music listening is prohibited, thus some employees are exposed to unwanted public broadcasting of the radio. We have seen that the selection of radio is done randomly and there is no centralized decision maker on that issue. The choice of radio (pseudonyms are used for radio stations' names) can be seen as a company tradition which lacks functional use of music at work. The most broadcasted radio station is found to be "Radio Voice" which is a local radio station that is located in the same city as we conducted our research. It plays "hit" music mostly in Turkish and there are also programs related to local and national news.

The choice of radio selection is also in congruent with the most-liked music genre selection. Some employees expressed their displeasure with this unwilling exposition. We should also note that respondents are blue-collar workers and they are doing routine, repetitive tasks on serial bases. Exposition to the same radio station everyday may create a boring working environment and hence creates workplace stress, dissatisfaction and mental tiredness. Below we provided verbatim comments given by employees to the open-ended question asked on the third part. These comments are vivid examples related to the choice of radio station and employees' opinions about the general situation of music at work.

"Music is the food of my spirit. Hard working conditions make me physically tired whilst music makes me feel mentally relaxed" (29 years old, female employee).

"I don't want to listen to Radio Voice!" (33 years old, female employee).

“I got bored from listening to same radio station continuously, always ads! I want to listen to another radio station which has fewer ads” (31 years old, female employee).

“I don’t want to listen to same radio station every day. Same time, same music. I got bored!” (22 years old, female employee).

“I want to use headsets! Sometimes I cannot hear the music because of the machines” (22 years old, female employee).

After drawing the general picture of the music at work, we went deeper in order to understand employees’ attitudes towards the functions of music at work. The respondents of this study indicated strong connections with music listening and individual well-being. They think that listening to music at work is making them feel comfortable, it is entertaining and they think music lifts their energy up. Employees also believe that music at work creates more productive and pleasant working environment by making them to concentrate on their jobs, increases their working pace and blocks the irrelevant outside noises and talks. The results also indicated that music makes the workplace a less boring one and make time goes faster. It is interesting to see that the respondents did not indicate that music makes them to think life-out-of-work. Listening to music at work does not cause employees to talk about it in general, they just listen to it, and they do not seem to care about the musical genre and prefer not to talk about music-related issues at work. Employees enjoy listening to music during their breaks and they relatively less likely to listen to music during commuting to/from work.

6. CONCLUSION AND SUGGESTIONS FOR FURTHER RESEARCH

Prichard, Korczynski and Elmes say *“Music can be regarded as a fundamental form of human organizing. It is drawn on to organize and order our activities, our emotions and the ways in which we experience the world.”* while they are calling for the *Group & Organization Management’s* special issue on music at work (2004). In spite of the fact that music is an encompassing phenomena on all human activities, research related its functions, especially at work, is limited. Our research is a modest exploratory step towards the amalgamation of this gap. In addition to confirming aforementioned functions of music as a mood regulating device for human well-being, we also tried to provide the recent situation of music at the factory floor by the lens of blue-collar workers-the group that we think worth of studying but lately lost its attractiveness among social scientists.

Low number of respondents and our entry limitations to the research site were the major limitations of the study. The most remarkable outcome of this study is for the managers. Letting people to listen randomly selected radio stations is not enough and sometimes harmful, a thorough diagnosis is needed for the full realization of benefits of music at work. Music at work is an important part of human work life and with proper management it may yield favorable results both for the sake of productivity and for the sake employees' well-being.

Further studies should focus on the development of scales, especially for measuring blue-collar workers attitudes towards the functions of music at work.

ACKNOWLEDGEMENT

Authors would like to thank Anneli B. Haake for providing access to her PhD. dissertation and giving permission to use functions of music at work extracted from that study.

BIBLIOGRAPHY

Adorno, T. W. (2009). *Kültür Endüstrisi-Kültür Yönetimi*, İstanbul: İletişim.

Albert, Stuart. and Bell, Geoffrey, G., (2002), "Timing and Music", *Academy Of Management Review*, Vol. 27, No. 4, pp. 574-593.

Anand, N. and Watson, Mary, R., (2004), "Tournament Rituals in the Evolution of Fields: The Case of the Grammy Awards", *Academy of Management Journal*, Vol. 47, No.1, pp. 59-80.

Attali, J. (2005). *Gürültüden müziğe: Müziğin Ekonomi Politikası Üzerine*, İstanbul: Ayrıntı.

Complex of Sultan Beyzaid, II Health Museum, Trakya University,
<http://saglikmuzesi.trakya.edu.tr/> [Accessed 10.12.2010].

Comrey, A. L. and Lee, H. B. (1992). *A First Course in Factor Analysis* (2nd edition), Hillsdale, NJ: Erlbaum.

Group and Organization Management (2004), *Call for Special Issue on Music at Work*,

http://www.massey.ac.nz/~cprichar/music_at_work/special%20issue%20call%20for%20papers.htm [Accessed 10.02.2011].

Haake, Anneli, B. (2010), Music Listening in UK Offices: Balancing Internal Needs and External Considerations, Unpublished doctoral dissertation, University of Sheffield, UK.

Humphreys, M., Brown, A., & Hatch, Mary. J., (2003), "Is ethnography jazz?", *Organization*, Vol. 10, No. 1, pp. 5-31.

Korczynski, Marek and Jones, Keith., (2006), "Instrumental Music? The Origins of Broadcast Music in British Factories", *Popular Music*, Vol. 25, No. 2, pp. 145-164.

Korczynski, Marek., (2007), "Music and Meaning on the Factory Floor", *Work and Occupations*, Vol. 34, No. 3, pp. 253-289.

Korczynski, Marek., Robertson, Emma., Pickering, Michael., and Jones, Keith., (2005), "We Sang Ourselves Through That War", *Labour History Review*, Vol. 70, No. 2. pp. 187-214.

Lesiuk, Teresa., (2005), "The Effect of Music Listening on Work Performance", *Psychology of Music*, No. 33, Vol. 2, pp. 173-191.

Meyer, Alan., Frost, Peter, J., and Weick, Karl, E, (1998), "The Organization Science Jazz Festival: Improvisation As A Metaphor for Organizing: Overture", *Organization Science*, Vol. 9, No. 5, pp. 540-542.

Negus, Keith., (1999), "The Music Business and Rap: Between the Streets and the Executive Suite", *Cultural Studies*, Vol.13, No. 3, pp. 488-508.

Nichols, Theo. and Suğur, Nadir., (2004), *Global Management, Local Labour*. New York: Palgrave Macmillan.

OECD, *Glossary of Statistical Terms*,
<http://stats.oecd.org/glossary/detail.asp?ID=4838> [Accessed 07.02.2011].

Prichard, Craig, Korczynski, Marek. and Elmes, Michael (2007), "Music at Work: An Introduction", *Group & Organization Management*, Vol. 32, No. 4, pp. 4-21.

Rhodes, Carl., (2007), "Outside the Gates of Eden: Utopia and Work in Rock Music", *Group & Organization Management*, Vol. 32, No. 4, pp. 22-49.

Sköld, David. and Alf, Ren., (2007), Makin' It, by Keeping It Real: Street Talk, Rap Music, and the Forgotten Entrepreneurship From "the 'Hood'", *Group & Organization Management*, Vol. 32, No. 4, pp. 50-78.

The Fun Theory, <http://www.thefuntheory.com/piano-staircase> [Accessed 07.08.2010].

Turkey's State Planning Organization and World Bank, (2009), *Female Labour Participation in Turkey: Trends, Determinants and Policy Framework*, http://siteresources.worldbank.org/TURKEYEXTN/Resources/361711-1268839345767/Female_LFP-en.pdf [Accessed 17.02.2011].

Uhrbrock, Richard, S. (1961), "Music on the Job: Its Influence on Worker Morale and Production", *Personnel Psychology*, Vol.14, No. 1, pp. 9-38.

Wokun, W. (1969), "Music for Working". *Science Journal*, 5a, pp. 55-59.