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Music education research in Mexico. An exploratory-diagnostic study

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The production of knowledge is the most important wealth of a country. This is only obtained by promoting basic science. Only in this way will knowledge lead to the solution of national problems, but also of this new global world.

Mexican Academy of Sciences (2017, n/p)

Abstract: This article presents the results of a qualitative exploratory-diagnostic study, developed with the purpose of forging an overview of the current situation of music education research in Mexico from the perspective of six of its more notorious scholars. Data was gathered through semi-structured interviews. The information collected indicates music education research in Mexico exhibits numerous weaknesses. According to the interviewees, the insufficient institutional support, the slow and complicated bureaucracy, the absence of flexibility in the schedule and the lack of balance concerning the academic load represent some of the challenges that impede its development. Thus, they consider authorities must support research more decisively, implement strategies to hire committed and specialized scholars, reduce bureaucratic procedures, improve the equilibrium of academic loads and foster the application of research generated knowledge in real contexts. According to informants, only by doing so will there be better chances to promote the generation of new knowledge to address social issues, to stimulate the publication of high-impact products, as well as meeting institutional indicators of quality.

Keywords: Research; music education; higher education; researchers' training; strengths and weaknesses.

Summary. 1. Introduction. 2. Theoretical framework. 3. Objectives. 4. Methods and materials. 5. Results and discussion. 6. Conclusions. 7. References.

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1. Introduction

The 21st century in Mexico demands higher music education institutions to hire scholars who, in addition to fulfilling the substantive university functions of teaching, publishing, management and networking, exercise research on a daily basis with the purpose of generating new knowledge intended to solve social problems, promote positive changes and foster improvements (Lomelí, 2016; Nielsen, 2009; Porta, 2014). Thus, researchers are expected to achieve numerous academic indicators in order to demonstrate the commitment the institution has with society and reflect the compliance with multiple quality criteria established by government agencies such as the Secretary of Public Education (SEP), and by non-governmental organizations such as the National Council of Science and Technology (Conacyt) and the Ibero-American University Association of Graduate Studies (AUIP), among others (Capistrán-Gracia, 2021).

The research topics in music education are diverse and interesting and their approach generates valuable knowledge that can and should be used to consolidate this discipline (Díaz, 2012) and in favor of society (Aróstegui and Rusinek, 2021; Subirats, 2011). Thus, for example, several studies have indicated that the participation of children and young people in educational-musical activities has a positive impact on brain plasticity (Nam, 2000), improves academic performance (Baker, 2011; Schellenberg, 2004) and facilitates mental processes (Hallam, 2010). Furthermore, it promotes the development of social capital (Jones, 2010;

Putnam and Feldstein, 2003) and contributes to the reconstruction of the social fabric (Herrerías, 2019). However, the yearbook published by the National Association of Universities and Institutions of Higher Education lists only 14 public tertiary music education programs (Anuies, 2022), research in this area is extremely incipient and academic publications are very limited (Capistrán-Gracia, 2021). Similarly, in Mexico there are only two collaboration networks in music education research supported by the Program for Teacher's Professional Development (PRODEP) (García, 2019) and only four university professors specialized in this discipline currently hold the distinction granted by the National System of Researchers (SNI) of Conacyt (Conacyt, 2021, 2022).

Unfortunately, very little research on this topic has been developed; thus, the factors that could be negatively affecting the development of research in the music education field are unknown.

2. Theoretical framework

Due to the scarce information on music education research in Mexico, the author has reviewed various works developed in related disciplinary areas, which shed light on the situation. Thus, Aldana (2012), Chavoya (2002), Flores (2018), López, Hernández and Cañedo (2017) and the OECD (2019) attribute the problem to the little investment made in favor of science and the lack of a scientific culture, while Metlich (2009) and Ortiz (2010) point out the academic load and the heavy and slow bureaucratic structures as conditioning factors that hinder the processes that surround research. Finally, Ortiz (2010), Porta (2014) and Rivas (2004) highlight the deficiencies in the academic training of researchers and the lack of intellectual capital.

From another perspective, Lloyd (2018) has identified interpersonal problems derived from the inequality in privileges between full-time research professors and part-time professors. In the musical field it could not be more evident. The recent professionalization of the arts and the late emergence of graduate degrees in Mexico have led to substantial differences in the teaching staff. Most educational programs have a very high percentage of part-time professors who usually hold a bachelor's degree and sometimes a master's degree, and a very small percentage of full-time professors with a doctoral degree (Buendía & Acosta, 2016; OECD, 2019). Of course, the latter have an office (when the university infrastructure allows it) and have enough time to carry out research (Capistrán-Gracia, 2021). These differences have caused tensions and hierarchies, even though privileges, such as those derived from the SNI distinction, are accompanied by numerous responsibilities and obligations (Lloyd, 2018), as well as fear because of the uncertainty of not having enough papers published in time for the next SNI call (Camarillo, 2015).

In the music education field, Capistrán-Gracia (2021) has focused his attention on the deficiencies that many scholars exhibit concerning research methodologies, as well as on the lack of support from higher education institutions, which could help professors remediate those weaknesses.

In synthesis, the lack of music education research in Mexico derives from social, cultural, academic and economic factors (Aldana, 2012; Odena, 2015). Unfortunately, as explained above, the issue has been very scarcely addressed, and, as a consequence, the absence of data impedes having an overview of the situation and generating proposals for its improvement.

3. Objectives

- 1. To identify the challenges that researchers in music education must face to carry out their work.
- To outline the strategies that university authorities could implement to promote research in this area of knowledge.
- 3. To provide an overview concerning the situation of music education research in Mexico.

4. Methods and materials

Data gathering tool

The author conducted a qualitative, exploratory-diagnostic study. For the purpose of data gathering, he implemented in-depth interviews by using a semi-structured questionnaire that included descriptive, structural and contrasting questions as well as more specific questions to expand a topic or to discard doubts (Spradley, 1979).

Participants

The study involved six full-time university professors holding a doctorate, whose publications focus on the field of music education: two of the four SNI researchers specialized in music education, 2 researchers without that distinction who had received it previously, and two researchers who, despite not holding the distinction, have demonstrated leadership through important publications. The informants work at the Autonomous University of Aguascalientes, the Autonomous University of the State of Hidalgo, the Autonomous University of Chihuahua, the National Autonomous University of Mexico and the Autonomous University of Zacatecas.

Procedure

The researcher contacted the informants to explain the purpose of the study, guaranteed the confidentiality of the information, and assured that it would be used exclusively for the purpose of the research. Subsequently, an informed consent was signed and a date and time was set for the interviews. Due to the health contingency derived from the Covid-19 pandemic, the interviews were carried out through the https://

zoom.us/ telecommunication platform. These were audiotaped and had a duration that fluctuated between 58 minutes and one hour and 16 minutes. In most cases, more than one interview was conducted to ensure the accuracy of the information or to expand it. Subsequent interviews lasted 5 to 20 minutes. During the interview, the researcher tried to show an attitude of respectful interest, established eye contact and gave the interviewees absolute freedom to express themselves. When he observed that the interviews did not yield new knowledge that would contribute to a better understanding of the supercategories, he decided the information had been reached (Creswell, 2007).

Data analysis

The information collected was transcribed *verbatim*. The researcher employed the methodology proposed by González (1998) to systematize and analyze data. This involves the following five steps:

a) Conceptualization

The first step in the methodology consisted of identifying analysis units (central thoughts and/or ideas) shared by informants. This process started with a meticulous line by line analysis.

b) Categorization

The analysis units were grouped into categories, which were labeled by the author by using analytical codes.

c) Organization

This part of the process consisted of identifying the logic that connected the units of analysis with the subcategories and these with the categories until determining their interrelation or subordination.

d) Structuring

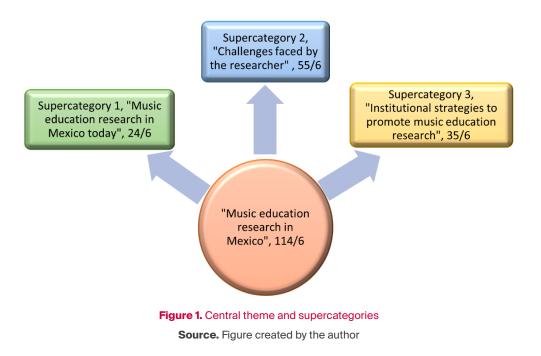
After the organization process, a concept map was generated that allowed the researcher to visualize the general structure.

e) Data analysis and interpretation

Departing from the concept map, the researcher carried a vertical analysis through which he organized the categories and subcategories according to the amount of data provided by informants with the purpose of determining the most relevant patterns of significance. Because each interview included more than one question, he also carried a horizontal interpretive analysis to understand the interrelationship between emerging supercategories, categories and subcategories.

5. Results and discussion

Three supercategories emerged out of the collected data: 1) Music education research in Mexico today; 2) Challenges faced by the researcher; and 3) Institutional strategies to promote music education research (see Figure 1). From these, a significant number of categories and subcategories emerged. After the name of each of them the reader will find two digits separated by a slash. These indicate the number of statements relevant to that category and the number of interviewees who issued them, which allowed the researcher to determine the most relevant patterns of significance. For example, 9/4 means the category is based on 9 statements issued by 4 interviewees. Due to the limit in the number of words this article may have the transcription of statements was reduced.



5.1. Supercategory 1. Educational-musical research in Mexico today

This supercategory includes all those statements that allow the author to identify the perceptions that informants have regarding the current situation of research in the field of music education in Mexico. Analysis units such as "incipient", "disjointed", "with deficiencies", "heterogeneous in quality" and "with a long way to go" characterized this supercategory and reflect the serious existing weaknesses. Three categories emerged from data analysis (see Figure 2).

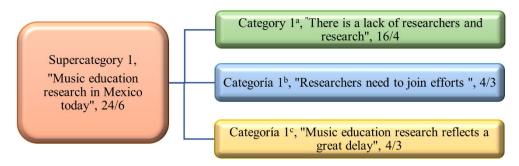


Figure 2. Supercategory 1 and derived categories

Source. Figure created by the author

In first place, researchers highlighted "There is a lack of researchers and research" (category 1, 16/4), concerning music education in Mexico. Thus, Informant 1 asserted: "There are very few researchers who have achieved the SNI distinction. It's up to the few of us who have this kind of recognition to strengthen research." In the same vein, Informant 3 noted: "There is little research in music in our country, both institutionally and privately... Its scarce presence increases the information deficiencies for a large part of the musical subjects that are taught." These results coincide with those achieved by Capistrán-Gracia (2021) in relation to the insufficient number of researchers and, therefore, of studies that generate new knowledge concerning this discipline. According to the Mexican Council of Educational Research (COMIE, 2004) the lack of researchers in the field of general education in Mexico is closely related to the lack of adequate training, which is connected to the statement of Informant 5:

If there is something that must be worked on to improve the situation of research in music education in Mexico, it is the graduate degrees in which researchers get trained. It is necessary to improve them so they train researchers who really have that vision, that approach. That is what we need.

Thus, it is clear that greater attention is required from the authorities of higher education institutions, so the few graduate programs that exist in Mexico promote a more complete and rigorous training to fully enable researchers (Capistrán-Gracia, 2021; 2022).

Three scholars highlighted that "Researchers need to join efforts" in order to keep up to date as well as to develop a synergy that would promote the generation of new knowledge (Category 1^b, 4/3). Thus, Informant 1 stated: "We should also rely on other disciplines and [work] with other researchers to keep updated in our research and in our teaching responsibilities." In the same sense, Informant 3, said: "There is a lack of connection with other disciplines not necessarily musical," while Informant 5, added: "We still need to foster well established networks [of researchers] so our efforts are not isolated..."

Academic and social networking represents a crucial mechanism for higher education institutions to foster effective communication with society through agreements and strategies in order to allow research to respond to society's demands, while promoting contact with the real world (Mass and Sabulsky, 2014). Furthermore, research in the 21st century demands the use of multi and interdisciplinary approaches (Odena, 2015). However, informants' statements reveal an important weakness in this area, for, as explained by the OECD (2019), in Mexico there is no tradition of academic and social networking.

Finally, three researchers made statements indicating that "Music education research reflects a great delay" (category 1°, 3/3) compared to other disciplines and other countries, which in turn, is one of the factors that explain its current situation. Thus, Informant 2 made a comparison:

Well, it's very complicated. Listen, in 1921, the government of Mexico found SEP. That was the first idea of an educational system in our country; however, in 1921, Germany had already organized its first conference on music education. That is how delayed we are.

Similarly, Informant 3 explained:

We know the development of research, in all its primordial attributes, is usually carried out in universities. I believe universities offering music degrees should promote research as a substantive task, from having the primary elements of support and infrastructure in libraries, diverse and special archives, up to the encouragement of human resources, as a primary incentive for academic inquiry. However, I see that music education research has not yet managed to deploy its demands sufficiently within most educational institutions.

Although this information coincides with the results of studies carried out in related disciplinary areas by scholars like Aldana (2012), Cruz (2017), Ortiz (2010), Porta (2014), Ramos (2013) and Rivas (2004) and by organizations such as COMIE (2004) and OECD (2019), among others, it is necessary to emphasize that the situation in the music education field is even more serious due to the very small number of SNI researchers (Conacyt, 2021, 2022) as well as the scarce number of publications and academic events (Capistrán-Gracia, 2021), among others.

5.2. Supercategory 2. Challenges faced by the researcher

This supercategory is concerned with the challenges, obstacles and problems that researchers face to adequately carry out their projects and represents the core part of this study, because it may reveal some of the factors that have stopped the development of music education research in Mexico. The information collected allowed to generate three categories and seven subcategories (see Figure 3).

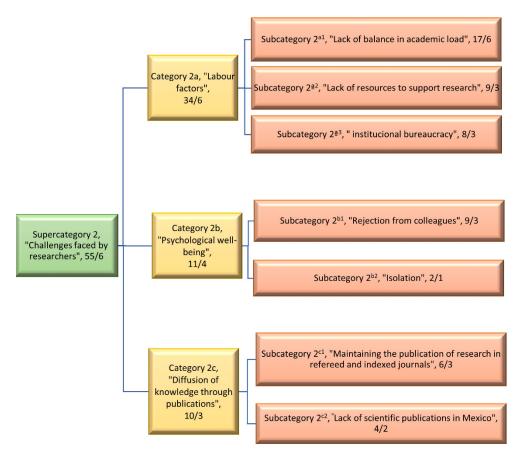


Figure 3. Supercategory 2 and derived categories and subcategories

Source. Figure created by the author

According to the informants, the proper development of research projects implies, among other things, the investment of an enormous amount of time and effort in the review of sources of information of various kinds, the performance of fieldwork, the adequate recording of data derived from the study, its careful analysis, as well as the corresponding writing of the research report. Unfortunately, many times they do not have adequate working conditions or flexible work schedules that allow them to carry out their projects and at the same time fulfill the teaching responsibilities at undergraduate and graduate level, do academic outreach (e.g. evaluation and review of academic texts, participation as juries in degree examinations); participate in academic councils and promote the dissemination of research (e.g. presentation of papers in conferences, preparation of workshops and so forth). Thus, in synthesis, the "Labour factors" (category 2, 34/6) constitute one of the main obstacles for researchers to carry out their work (Metlich, 2009; Muñoz, 2019).

The "Lack of balance in academic load" (subcategory 2^{a1}, 17/6) is the number one problem, since it prevents the adequate development of research projects (Metlich, 2009; Muñoz, 2019). As Informant 3 explains:

It is important to establish the time dedicated to research. Striking and maintaining a good balance within the academic load leads to a researcher's success. Teaching and other important responsibilities, such as tutoring theses and management, can reduce the quantity and quality of the research publications.

The lack of balance in the workload promotes the researchers' frustration and the feeling of not being valued and understood, feelings that are reflected in statements such as: "I ignore if they do not know or they do not want to know that after school you go home to continue working. I don't know! That you are working Saturdays, Sundays and holidays, and that you do not depend on a time-clock system" (Informant 2).

Of course, the "Lack of resources to support research" (subcategory 2^{a2}, 9/3) derived from the little investment made in favor of science and the lack of a scientific culture (Aldana, 2012; Chavoya, 2002; Flowers, 2018; López, Hernández and Cañedo, 2017; OECD, 2019) represents a serious obstacle for the proper development of research and researchers. Furthermore, in some cases, the lack of clear regulation can result in resources being distributed in a discretionary manner (Metlich, 2009). In this regard, Informant 1 stated: "Unfortunately, the support of our own institutions is limited or simply discretionary. Thus, we have to look for other ways to stay updated and connected with the group of researchers who do serious research at an international level." More succinctly, Informant 5 stated, "Basically, I manage to solve my own material and economic issues."

The "Institutional bureaucracy" (subcategory 2^{a3}, 8/3), with its complex and slow administrative processes, distracts scholars from their research projects and takes away their time (Metlich, 2009; López-Leyva, Alvarado-Borrego & Mungaray-Moctezuma, 2018; Ortiz, 2010). In this regard, Informant 3 explained: "Many times the academic and organizational structure hinders the processes of change. Its almost bureaucratic conditions prevent the transition towards educational quality, towards the improvement of research". Informant 5 described this problem in a more colloquial way by stating: "It is like going in circles, because when one understands something it turns out to be the other way."

Besides the labour factors, the results indicate there are also interpersonal aspects that promote frustration, disappointment and reluctance in researchers (Lloyd, 2018) and affect their "Psychological well-being" (category 2^b, 11/4). One of them is the "Rejection from colleagues" (subcategory 2^{b1}, 9/3), which, although it does not prevent the research work from being carried out, it makes researchers feel bad. As Informant 1 explained: "Rejection! What can I tell you? The fact that I am the first to have the SNI distinction, which paved the way for what should be done as a teacher and researcher, has earned me many enemies".

One type of rejection is represented by the refusal of professors to cooperate with researchers, as in the case of Informant 5, who shared the following anecdote:

I had problems with two professors who refused to participate in one of my investigations. When I proposed recording their classes as part of a study, they told me: "I'll let you know when to do it." I spent a month sitting in the hallway of the school. Nobody, nobody, nobody, nobody, nobody, nobody, nobody, nobody was willing to help me. Thus, I had to reinvent the whole research project.

According to the informants, another way to express rejection towards them is by showing contempt for the results of their studies, as Informant 2 explained:

It seems incredible that sometimes our research publications are more appreciated abroad than in our own schools, in our own programs. Our publications have been cited by other professors. In other places they look to us for advice. However, it seems that, internally, they are not valued the same way.

The situation described above tends to disappoint researchers, since they expect the knowledge they generate in the field of music education will contribute to solve the deficiencies, vacuums, problems and weaknesses that are identified within the music schools they belong to (Odena, 2015). Unfortunately, this is almost never the case (López et al, 2017; Odena, 2015), and it seems that research is carried out only to comply with the quality indicators established by national and international organisms (Ortiz, 2010; Ramos, 2013). In this sense, it is crucial that music school authorities establish an open, honest and continuous dialogue with researchers, show interest in research results and use them for the benefit of the academic community (Capistrán-Gracia, 2021).

Finally, rejection and disinterest lead to "Isolation" (subcategory 2^{b2}, 2/1) caused by the lack of colleagues to create research teams. In that regard, Informant 4 highlighted: "Listen, to begin with, the first challenge I had several years ago was represented by the lack of colleagues. This challenge has been solved in recent years with my advanced students. Now, they are my colleagues!"

Although the primary goal of research is the generation of new knowledge to address social problems, it is not very useful until that knowledge is disseminated and put at the service of users (Bonilla, 2015; Ortiz, 2010). However, the "dissemination of knowledge through publications" (category 2^c, 10/3) involves great challenges. The first is to "achieve the publication of research in refereed and indexed journals" (subcategory 2^{c1}, 6/3). In this regard, the researcher, especially the one who has received the SNI distinction or wants to receive it, must maintain a sustained pace of work to generate new knowledge, write papers and publish them. Of course the researcher must take into consideration the time to wait for the evaluation results and the corresponding anguish and uncertainty concerning the acceptance of the paper (Camarillo, 2015), as Informant 2 explained:

Concerning the commitment to publication that we assume, we know that in this field of research it takes time. First, writing a paper is not something that is generated from one month to another. To generate a good quality publication you need to sit down and write with all the clarity and with all the commitment and responsibility. So, in a year we barely have collected the research information. We meet the challenges of publishing books, articles, book chapters, but always a little late, because review times and dictaminations are always lengthy processes.

From the perspective of informants, this challenge is compounded by the "Lack of scientific publications in Mexico" (subcategory 2^{c2}, 4/2), a deficiency pointed out by scholars such as Bonilla (2015) and Ortiz (2010) and reflected in the statement of Informant 3:

Conacyt recognizes the publications we make, as long as they are published in indexed journals and prestigious publishers. Here, I see some problems for our field. Indexed national journals dedicated to academic music, art music, concert music and, of course, music education, are almost nonexistent.

Informant 2 complained that publications in conference proceedings do not have the same value as articles published in indexed or refereed journals, despite the fact that some of them (such as the proceedings derived from the Mexican Conference on Educational Research) employ rigorous evaluation protocols: "They say that proceedings do not count. Don't they count for whom? Besides, that's the place where I want to publish because they are the people that I want to read my papers."

5.3. Supercategory 3. Institutional strategies to promote research

Of course, the researchers themselves, who daily face a significant number of challenges to carry out their projects, have already conceived a series of actions that their institutions could implement to support them and promote music education research in Mexico. From the statements shared by the informants in this regard, two categories and 6 subcategories emerged (see Figure 4).

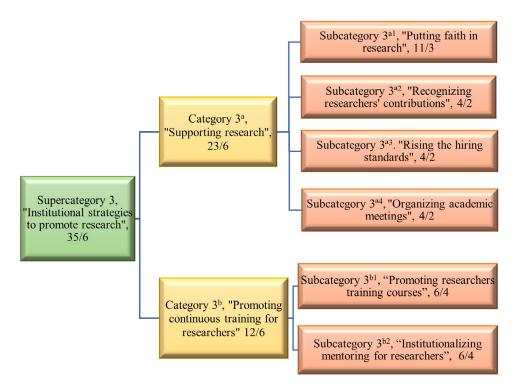


Figure 4. Supercategory 3 with emerging categories and subcategories

Source. Figure created by the author

Of course, all scholars stated that "Supporting research" (category 3, 23/6), was a priority and that research should be strongly promoted so it could be developed more adequately (Aldana, 2012; Ortiz, 2010; Flowers, 2018). In this regard, "Putting faith on research" (subcategory 3^{a1}, 11/3), (investing economic resources and academic support) represents the first action to implement, because, as explained by Informant 1, the origin of the problem lies in the lack of a clear vision concerning what must be achieved:

As long as there is no commitment from academic authorities, to really support research objectively and institutionally; as long as those who are in charge of institutions do not have the vision to support research, we will not get out of this situation if they do not take the relevant measures.

Informant 5 pointed out the importance of university authorities believing in research and investing sufficient economic resources to promote it (Archundia, 2020), not only to maintain the institutional academic indicators it represents, but also for the social, economic and educational benefits it brings (Hernández and Hernández, 2012; Ramos, 2013):

The university has to invest in research. Although in some areas such as physics we have world-wide recognized researchers, in everything else we do not. [Music education research] It is left alone. They are interested in us holding the SNI distinction, but only to improve the academic indicators.

Certainly, a challenge, when properly addressed, becomes part of the strategies to promote research. Thus, three of the informants agreed that balancing the substantive functions of universities was essential so the professor does not feel overwhelmed with the workload and can adequately develop their research projects (Metlich, 2009; Muñoz, 2019). In this regard Informant 5 explained:

They don't really prioritize that [research], they choose the massification of students. Having many, many, many students, it doesn't matter that we serve them badly. With groups of 50 or 60 students the teacher enters the classroom healthy and goes insane in one day.

From the perspective of Informant 3, there are educational institutions that have been able to achieve a balance in the distribution of the academic load; however, many others continue with schemes that harm the researcher:

There are some universities and public education institutions in Mexico that have been able to achieve an organizational balance between academic life, the integration of university substantive functions, the types of contracts of teaching staff and their internal finances. There are others who constantly strive to achieve that healthy and profitable balance.

The work done by the good researcher cannot be simulated, as it is reflected in the publication of research that, in turn, contributes to the fulfillment of academic indicators (Hernández and Hernández, 2012). This productivity is the result of a large investment of time and effort that is not always recognized by the institution and that often causes a low level of job satisfaction (Aguilar, Magaña and Surdez, 2011). In that sense, two participants agreed that it is necessary that the authorities "Recognize researchers' contributions" (subcategory 3^{a2}, 4/2), since, as Informant 1 warned: "Those of us who are complying with the standards are going to be even more demotivated, or as in my case, think about leaving because my work is not recognized." Similarly, Informant 2 asserted: "Sometimes I feel that here at the university they don't see that. It's as if they've picked up people from the street without a curriculum vitae or track record. I would hope they saw our professional trajectory."

Two informants believed that, in order to promote research, institutions should "Raise the hiring standards" (subcategory 3^{a3}, 4/2), for as Ramos (2013) explains, many teachers pursue graduate studies with the sole purpose of achieving a full-time position in order to ensure their permanence in the institution and not with the intention to do research. Thus, it is not surprising that Informant 1 asserted: "To begin with, authorities must stop the hiring of pseudo-researchers... If they want to raise the level, they have to request that those who are hired meet a minimum profile. Having a doctorate is not enough. They must show evidence of commitment to teaching, research, management and networking".

In fact, part of the statement of Informant 1 reflects that the hiring of new professors might be done in some higher education institutions simply because the candidate has a doctorate, instead of doing it in a collegial manner, considering the consolidation of research lines (Metlich, 2009).

According to two of the informants, it is crucial to "Organize academic meetings" (subcategory 3^{a4}, 4/2) such as conferences, colloquiums, symposia and the like, since they represent sources of information for innovation, as well as for the generation of knowledge, in addition to promoting a synergy that contributes to the development of research (Angulo, 2009). In that sense, Informant 6 explained: "It is necessary to organize conferences and invite people who are really worthwhile and teach well." For his part, Informant 5 said: "[Promoting] national meetings. At first there might be one representative per school for specific conferences; not too ambitious, rather small and with a very clear focus."

Finally, informants agreed that "Promoting continuous training for researchers" (category 3^b, 12/6) constitutes a more than viable strategy to promote research (Capistrán-Gracia, 2021), since, as Informant 1 explained:

There are many possibilities or many definitions of what music education can be. The same thing happens in music education research. For example, there are a myriad of research methodologies that one is not necessarily familiar with.

In that sense, informants considered that, in the same way that universities promoted teacher training courses, they should "Promote researchers training courses" (subcategory 3^{b1}, 6/4), since, as Informant 3 explained:

I believe that it is necessary to carry out this noble activity, and not only to achieve the SNI distinction, but to be able to really improve our quality standards in accordance with the priorities of updating and consolidation of knowledge in all musical fields and their multidisciplinary interrelations. The success of this strategy -for which we will assert ourselves even more- will have an immediate impact on our systematic investigation and artistic-cultural publications.

In the same way, Informant 6 affirmed: "The courses, workshops and certificate programs in research, of course, should exist, that without hesitation." Finally, Informant 1 added: "And they could be more focused on the projects of incipient researchers. They could focus on understanding the research process, contextualize what they are learning in a particular project."

Of course, "Institutionalizing mentoring for researchers" (subcategory 3^{b2}, 6/4), was also considered a relevant action to promote research (Capistrán-Gracia, 2021) and raise the quality of publications (López et al, 2018), because, as Informant 4 explained:

I totally agree. Yes, I think it is totally correct! Actually, that is the formula research laboratories have at UNAM, for example, where students always work directly with the researchers. Even in some institutes of the UNAM, such as the Institute of Biomedical Research. They even designed a bachelor's degree, and got the students involved into the labs from the very beginning.

Similarly, Informant 5 assessed the possibilities of implementing mentoring, adding:

I think mentoring programs would work. The main problem would be to make researchers and incipient researchers aware that knowledge is not one's property and that everything has to be shared.

Furthermore, Informant 1 considered the possibility of a mutual benefit between the mentor and the researcher seeking mentoring: "Sure! And there is the possibility that from these mentoring processes will also emerge collegial publications that increase the scientific production of both parties." However, the same Informant pointed out a possible weakness:

The question here is: who is going to be the mentor? And who has the potential to provide that mentoring? Because, as researchers, we have limited time, so it is a bit complex to spend time training other researchers when there is no time left for our own research.

In a nutshell, the results have confirmed that there is a significant number of social, cultural, academic and economic problems, and that addressing them represents a great challenge. However, it is crucial that university authorities do so for the sake of researchers, society and higher education institutions. By carrying out a horizontal analysis of the categories, the author has been able to identify a series of factors that enhance that the researchers in music education can satisfactorily fulfill their mission: a) solid academic preparation; (b) balanced and flexible workload; (c) institutional academic support; (d) adequate funding; e) linking of research with society; (f) institutional recognition and; g) researchers' sense of belonging (see Figure 5). The author expects this analysis will be useful as a reference to decisively support music education research and researchers.



Figure 5. Factors that intervene to support the researcher and promote research

Source. Figure created by the author

6. Conclusions

The results of this research have revealed important areas of opportunity in the field of music education research that can and should be addressed. To begin with, it is crucial that higher education authorities are convinced of the importance of this academic function and promote research by all possible means and without sparing resources.

An important part of this effort must be aimed at the integral qualification of the scholar, who, as we have seen, many times exhibits knowledge deficiencies and training weaknesses. This requires, of course, the active participation of authorities in the organization of courses, workshops, seminars and other training actions for researchers. If institutions do something similar for teachers through continuous teacher training programs, why couldn't they do it for their researchers?

In the same way, it is vital that authorities in higher education institutions get involved in reducing and, if possible, eliminating the academic and administrative challenges that researchers in music education have to face. In that sense, they must promote a more perfect congruence between the teaching needs that music schools have and the expectations that research departments and graduate schools have. It is not possible, for example, to carry out fieldwork or attend conferences, if the researcher must teach a class every day of the

week, or if they must run back to school to log out at the end of the working day when they are in the middle of a participant observation.

The author of this report does not intend to deny the advances that have been achieved in music education research in our country, which have certainly been achieved thanks to institutional support (Capistrán-Gracia, 2021). However, the findings of this research indicate that the problems faced by researchers in music education (and in all disciplines) are many, are real and hinder their performance and scientific production. Thus, it is in the hands of the institutional authorities to take care of them through dialogue, understanding and willingness to support them (OECD, 2019). If university researchers in Mexico represent the most important agents to contribute to the fulfillment of many of the demanding indicators established by the institution, society, and organisms such as the SEP, Conacyt, ANUIES, PNPC and AUIP, to mention just a few, it is fair that in return they receive recognition, as well as the moral, academic and financial support they deserve. Only this way will the Mexican Academy of Sciences and Mexican society in general be able to achieve their expectations.

7. References

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