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The Social Climate of the East Asian Recording Studios

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ABSTRACT

Using survey material from Brooks et al. [1] that draws upon Yang and Carroll's [2] microaggression study in STEM academia, we captured the experiences of discrimination and the working conditions of 50 sound engineers, music producers, and studio assistants from three Eastern Asian countries. There were 37 participants from China, 4 from Japan, and 8 from South Korea. Our statistical analyses showed gender to be the strongest predictor of social discrimination in the recording studio. While comparing our findings with those obtained by Brooks et al., and Yang and Carroll, we found that cisgender women are 10.7% more likely to report having experience of being silenced and marginalized than cisgender men. Also, our grounded theory analysis-based inductive coding of the responses to open questions showed that the public has insufficient knowledge of the role and contributions of production team members in the East-Asian music industry, meaning that music producers, sound engineers, and studio assistants are facing abusive working conditions in East Asian studios, regardless of their social identities.

1 Introduction

Social inequalities exist in recording studios in various forms, most frequently represented as gender inequalities [3]. For example, Burgess [4] noted that the number of female producers has remained low; and Smith et al.'s study [5] showed that only 2.6% of credited producers on the 2012-2021 Billboard charts are women. Burgess attributes this standstill in gender diversity to society in general, and to early childhood education in particular. Yet there are further issues that may be more to blame for the very low number of women working in the industry, which may result in difficulties for sound engineers to accept their responsibility.

In a recent research paper, Brooks et al. [1] examined how social factors such as gender, sexual orientation, race/ethnicity, disability, and age impact audio practitioners' experiences of microaggressions and social discrimination. Their online survey, filled out by nearly 400 audio engineers from 46 countries, found gender to be the most significant factor for microaggression factors such as SOB (sexual objectification) and SAM (silenced and marginalized). There have been very few studies conducted on gender inequalities in East Asian recording studio, and our research hopes to fill the void in this region.

2 Literature review

2.1 The social inequalities of global recording studios

Wolfe [6] examined the career development, experiences and use of technology in self-producing artists to determine gradually improving gender demographics, addressing the issue of gender from a feminist perspective. Wolfe showed that patriarchal frameworks continue to form the backbone of music industry institutions, but that the increasing visibility of women's works in creating and controlling sound powerfully challenges gender stereotypes, marginalization, and the containment of women's achievements in music marketing practices and media representations in the digital age. Hepworth-Sawyer et al. [7] also compiled a substantial number of interviews, personal cases and articles to address gender inequalities and masculine dominance in recording studios.

Apart from gender, other factors such as regionality and infrastructure also contribute to the social inequalities in studios. This roots the issue in a broader context associated with geographical information and policy. As Florida and Jackson [8] stated, "the music industry is being shaped by [a] dynamic tension between geographic concentration and dispersion". In terms of the infrastructure, government taxes and copyright laws are confirmed to be responsible for unequal conditions [3].

Moreover, access to these local, regional and national infrastructures is not equally dispersed; the strong relationship between new technologies and old inequities in today's information and knowledge-based society results in digital inequality [9]. From this perspective, infrastructure and the social and institutional conditions of schooling are viewed as major gatekeepers to professional music production in the twenty-first century.

When looking into power relationships in the studio, Kealy [10-12] compiled revealing information about the social organization of stakeholders in music production. Kaiser [3] also mentioned the concept of “distinction”, which is “touched by works that describe the social dynamics between studio practitioners”. For instance, practitioners who are precursors in using vintage equipment “distinguish” themselves, that is, they separate themselves from their DAW-based peers [13]. Age and race/ethnicity also play important roles in these distinction mechanisms. Brooks et al. [1] addressed these from an intersectional perspective and found that age is the second most important factor that influences experiences of microaggressions in the studio.

2.2 Gendered Confucian values in East Asian societies

While South Korea ranked 102nd among 156 countries in the 2021 Global Gender Gap Index, China ranked 107th and Japan 120th [14]. Women in East Asian countries are greatly influenced by Confucian values. When studying gendered paradigms in cultural conditions from China, Japan and South Korea, it is important to understand the impact of Confucianism on gender diversity as an important cultural factor and ethical philosophy. Originating from ancient China, Confucianism has largely defined the gender roles prescribed in the Three Obediences and Four Virtues, which binds female behavior by forming one of the moral standards for feudal etiquette [15]. Women are taught to follow the males in their families: the father before her marriage, the husband after she marries, and her sons in widowhood. While women are given the role of assisting their husbands and bringing up children, the concept of “virtuous women without talent” still has an influence on women's choice between family and work [16]. Jiang [17] also states that Chinese women do not have equal opportunity to succeed or earn recognition compared with their male counterparts, even in professional and academic areas. In South Korea, the country's origin myth of Tan'Gun and the adoption of Confucianism as the national philosophy in the second century [18] both place women in positions subordinate to men. The Confucian hierarchal social system in Japan suggests that the eldest son is responsible for supporting the family and taking care of aged family members while the wife takes on all the housework and raises the children [19].

2.3 Women in East Asian music industry

Women are underrepresented in the East Asian music industry. Additionally, there has been very limited

research conducted into the working conditions of East Asian women audio practitioners. In South Korea, the mainstream music industry has become a huge phenomenon that plays an influential role in reshaping Korean culture and identity beyond musicological aspects as it intertwines a complex combination of sound, performance, ethnicity and gender [20]. According to Lin and Rudolf [21], although K-pop has contributed to an increase in the visibility of Korea in the world as a form of soft power in Korea's foreign relations, the pervasively sexualized contents of K-pop, with its revealing costumes and suggestive choreography, indicate how the femininity of young female idols in the K-pop industry is manipulated in order to meet socially prescribed role expectations in a male-dominated society. Indeed, these female idols are constrained by heteropatriarchal norms that privilege male heterosexuality [22]. Jonas [23] stated that compared with their boy idol counterparts, girl idols find their labor devalued and the time devoted to their work more precarious. During their careers, which expire much quicker than those of boy idols, girl idols need to satisfy the patriarchal demands of their company and the expectations of the male audience. Moreover, they are often excluded from the creative process and managed by an androcentric creative team, which manifests discrimination in the form of extreme body policing and an overall lack of agency [24].

Female groups and solo artists in contemporary Japan are stereotyped through the view that they are controlled by male producers. Cogan [25] pointed out that an all-female band that takes full control of its destiny is highly subversive within the constraints of both Japanese popular music and post-war Japanese culture. As Toth [26] mentioned, major record labels in Japan also often tend to sell their female stars by highlighting their sexual desirability. In 2019, Japan's four major music festivals (Fuji Rock Festival, Summer Sonic, Rock in Japan Festival, and Rising Sun Rock Festival) entailed an average of 65% male acts and 35% female or mixed acts [27]. Meanwhile, women are experiencing hesitation around working behind the scenes as engineers or producers as people consider these jobs to be for men only. While women in East Asia are facing inequalities caused by the combination of cultural and social factors, it is of great importance to investigate the social climate in East Asian recording studios, as this will contribute to improving the situation for those experiencing microaggressions and discrimination in the field.

3 Theoretical framework

3.1 Microaggression theory

Microaggressions have been defined as “brief, everyday exchanges that send denigrating messages to certain individuals because of their group membership (e.g., race, gender, culture, religion, etc.)” [28]. To be more specific, these messages can be performed in verbal and non-verbal ways, they can be intentional or unintentional, and they target marginalized groups [29]. There are three types of microaggressions: microassaults, microinsults, and

microinvalidation. Research has consistently linked "day-to-day stress" caused by microaggressions to negative physical and emotional health effects, including higher levels of depression [30], anxiety, reduced psychological well-being, and diminished self-esteem [31].

3.2 Intersectionality

Intersectionality entails the recognition that everyone has their own unique experiences of discrimination and oppression, and that we must take into account anything and everything that might marginalize people, including gender, ethnicity, class, sexual orientation, and physical ability, amongst others [32]. It is suggested that the guiding premises of intersectional projects include (1) consideration of race, class, gender, sexuality, nationality, ethnicity, ability, age and similar markers of power that are interdependent and mutually constructed; (2) intersecting power relations that produce complex and interdependent social inequalities; (3) the social location of individuals and groups within intersecting power relations, which shapes their experiences and perspectives in the social world; and it is suggested that (4) the intersectionality of power relations addressing social issues requires intersectional analysis. As an extended project based on Brooks et al.'s research, this research follows their example [1]. By investigating experiences of microaggressions through an intersectional lens, we document "the workings of power relations in producing social inequalities and the social problems they engender" [33] within commercial recording studios.

3.3 Research questions

RQ1. How do music producers, audio engineers, and studio assistants view working conditions in terms of social equality in the East-Asian music production industry?

RQ2. How do demographic categories such as gender (GEN), sexual orientation (SOR), race/ethnicity (RET), migrant status (MIG), gross national income of country of residence (GNI), disability (DIS), and the continuous demographic variable age (AGE) impact what tasks audio engineers accomplish within the studio (TAS), how well they are paid (DRA), and how often they are properly credited for their work (CRE) in East Asian recording studios?

RQ3. What are music producers', audio engineers', and studio assistants' experiences of social discrimination and microaggressions in the commercial recording studios in East Asia? What factors are most likely to cause microaggressions?

4 Methods

4.1 Survey design

We employed Brooks et al.'s [1] survey material based on an intercategorical approach recommended by McCall [34] as a strategic use of analytic categories to document unequal relationships. Our survey, therefore, applies social categories strategically to record the inequalities in the East-Asian studio.

The survey consisted of questions that were divided into a demographic section and a microaggressions section. The demographic section contained 17 closed-ended questions and 10 open-ended questions, including ones concerning the self-identification in terms of gender (GEN), sexuality (SOR), race/ethnicity (RET) and disability status (DIS). Participants were also asked to answer questions about their age (AGE), country of origin and residence (MIG), years on the job (YOB), daily rate (DRA), how often they were appropriately credited for their work (CRE, five-point Likert scale (LS1), from *Almost Always* to *Almost Never*), whether they were rewarded, and which studio tasks they were involved in (TAS, e.g., Tracking; Mixing; Assisting, Producing). In the microaggressions section – which consisted of 53 closed-ended questions utilizing a five-point Likert scale (LS2) ranging from *Strongly disagree* to *Strongly agree* – we gathered studio professionals' experiences of microaggressions in the workplace. For the open-ended questions, respondents were asked to share their opinions and experiences based on their choices in the Likert scale questions.

4.2 Participant recruitment

Our target population consisted of studio professionals who have worked in music production as producers, recording/editing/mixing/mastering engineers, or studio assistants on other people's music in the last ten years in China, South Korea and/or Japan. As this study originally started as a group project, each of the group members made efforts to reach out to their contacts within the industry. We ended up with having primarily Chinese respondents as all our group members were from China. To tackle this problem, we asked for help from Dr. Amandine Pras and our classmates, who gave us access to their East Asian networks. Moreover, we also searched for professionals on social media platforms such as Instagram, XiaoHongShu, and Twines, as well as audio technology groups and professional college students' groups that many industry practitioners are involved in. Therefore, our recruitment strategy can be summed up as three approaches: sending emails through personal contacts, in-person recruitment of participants, and online dissemination of the survey via formal and informal channels.

Our goal was to collect a sample of roughly 100 respondents from China, Japan and Korea. We expected to gather a sample size sufficient to understand the experiences of members of various demographic categories of interest. Nevertheless, most of the studio professionals we contacted did not respond to our survey invitations or refused to participate.

4.3 Analysis approach

4.3.1 Grounded approach analysis

Based on the usable responses collected from all the respondents, we adopted a grounded approach to code respondents' self-definitions into appropriate categories for the descriptive analysis. Drawing upon

Table 1. Descriptive statistics

	Cisgender men	Cisgender women	Trans/nonbinary	Total
Total	26	21	3	50
Heterosexual	24	16	2	42
Non-heterosexual	2	5	1	8
Immigrant	6	7	1	14
Non-immigrant	20	14	2	36
AES member	4	1	1	6
Aware of AES D&I Committee	1	0	1	2

Brooks et al.'s study, [1] we coded Gender (GEN) using respondents' current self-identified gender, divided into three categories: trans/non-binary, cisgender women, and cisgender men. Sexual orientation (SOR) was coded into heterosexual and non-heterosexual (including lesbian, gay, bisexual, and asexual in our responses). It is also worth noting that our participants misinterpreted our questions about race/ethnicity, particularly the distinction between being indigenous and being local residents. Therefore, the information around racial minority was discarded. RET and MRET will not be included in the later analysis. None of the participants reported having a disability. Therefore, we decided not to include the effect of disability status (DIS) in the later analysis, and not to analyze the workplace microaggressions around disability (MDIS). Age (AGE) was calculated by subtracting respective years of birth from 2022.

To analyze daily rate (DRA), we collected the normal daily rate of individuals who free-lanced in music production and the normal yearly income of participants on payroll, which we later converted to a daily income. We converted the currency to USD based on the value of that currency on the date we stopped receiving new participants for the survey. We also discarded income information from participants who reported making less than 50% of their income from audio engineering. Experience of Audio Engineering Society Membership was coded into never having been a member, being a current member and being a former member, and awareness of the AES Diversity and Inclusion Committee was coded into being aware and not being aware of the AES Diversity and Inclusion Committee. Then there are seven factors regarding experiences of microaggressions: assumptions of beauty and sexual objectification (SOB); silenced and marginalized (SAM); stereotyped (STE); and workplace microaggressions around gender (MGEN), age (MAGE), culture (MCUL) and sexual orientation (MSOR).

4.3.2 Statistical analysis

After coding and organizing all the responses, we conducted statistical analyses using One-way Kruskal-Wallis tests and ANOVAs to relate the

demographic categories to CRE, DRA, AESM and AESD. A logistic regression was used to relate AGE to TAS while chi square tests were taken for independence. Cross tabulations were used to relate demographic categories other than AGE to TAS, and Cramer's V was used for estimating the effect sizes for the chi square tests.

For each of the microaggression factors we took an average score from the answers to their corresponding questions. For each combination of the demographic category and microaggression factor aggregate score, we also ran one-way Kruskal-Wallis tests and ANOVAs. A linear regression against each of the aggregate scores was run for the continuous variable AGE.

4.3.3 Open questions analysis

For the open-ended questions, we also applied grounded theory [35] to code the data from both the demographic and microaggressions portion inductively. Use of grounded theory as an analytical method involves a) open coding, meaning generating labeled codes from the information; b) axial coding, which organizes the codes into categories; c) selective coding, which develops the categories to generate core themes of the study. For the demographic portion, we coded data based on how respondents perceived whether they were appropriately credited for their work (CRE) and their expectations for better working conditions. For the microaggressions portion, all qualitative data was coded into three microaggression types to find out which factor mostly influence the microaggressions, e.g. gender (GEN), age (AGE), and sexual orientation (SOR).

4.3.4 Comparison with STEM study and the international study

A quantitative comparison of the main findings between our survey extension and Brooks et al.'s [1] international study was obtained. We also compared our findings with those obtained by Yang and Carroll [2], who conducted research on the experiences of women working within STEM academia.

5 Results

5.1 Descriptive statistics

A total of 80 participants started the survey. We analyzed only the data from participants who fully completed the demographic portion, leading to 50 usable responses (Table 1). Our sample focused on recording studios in East Asia, comprising data from 37 participants who were born in China, 8 in South Korea, 4 in Japan and 1 in Argentina (24 currently living in China, 10 in South Korea, 4 in Japan, 10 in the United Kingdom, 1 in the United States and 1 in Argentina). Out of these 50 participants, 28% (n = 14) reported currently living in a country different from the one they were born in, of whom the countries of residence include the United Kingdom (n=10), South Korea (n=2), Japan (n=1) and the United States (n=1). Out of these 50 responses, 29 completed the first microaggressions portion and 12 also completed the second. Although the number of the total samples did not reach our goal, the fact that half of the respondents

Table 2. P-values for χ^2 values and R^2 values, color coded by effect size (entries in purple indicate large effect size, entries in yellow indicate medium effect size, entries in blue indicate small effect size)

		GEN	SOR	MIG	AGE
		$P(\chi^2)$			$P(R^2)$
Daily rate	DRA	0.355	0.825	0.022	0.601
Properly credited	CRE	0.657	0.706	0.486	0.972
AES membership	AESM	0.522	0.740	0.786	0.362
Sexual objectification	SOB	0.014	0.763	0.111	0.997
Silenced and marginalized	SAM	0.002	0.426	0.127	0.112
Stereotyped	STE	0.048	0.335	0.128	0.332
Gender W.M	MGEN	0.044	0.324	0.266	0.111
Age W.M	MAGE	0.003	0.393	0.488	0.526
Sexual orientation W.M	MSOR	0.002	0.234	0.019	0.237
Cultural W.M	MCUL	0.004	0.206	0.169	0.137

were female/non-binary enabled us to conduct statistical tests about gender.

The descriptive results showed that out of the 50 usable responses, 52% ($n = 26$) of respondents were cisgender men, 42% ($n = 21$) were cisgender women and 6% ($n = 3$) were trans/non-binary gender. Meanwhile, 84% ($n=42$) of the respondents identified as heterosexual and 16% ($n=8$) identified as non-heterosexual. 75% ($n=37$) of the respondents were between the ages of 20 to 30 years old. The youngest participant was 20 and the oldest was 49.

5.2 Discrimination statistical analysis

5.2.1 Tasks (TAS)

There are significant differences in respondents' responses of *Mixing* ($p < 0.05$) based on different gender identities. Overall, cisgender women were about twice as likely as cisgender men to answer *Assisting*. Moreover, the percentages of cisgender men who answered *Mastering* and *Mixing* were 1.75 and 1.79 times as much as that of cisgender women respectively. Age also had a significant impact on how often respondents responded *Assisting* (increased with age, $p < 0.05$). Sexual orientation (SOR) and migrant status (MIG) had no significant impact on the survey responses.

5.2.2 Income (DRA)

Statistically, gender (GEN), sexual orientation (SOR) and age (AGE) were not significantly associated with differences in daily rate. This might result from our small sample of respondents, with only 39 respondents who reported their daily income. However, significant differences in daily rate were found around migrant status (MIG) ($p < 0.05$). Respondents whose countries of residence differ from their countries of birth made an average income of 35.2 USD per day, while those who are living in their home countries made 134.9 USD per day. Cisgender men made an average of 132 USD per day, while cisgender women made an average of 105 USD per day and trans/nonbinary people made an average of 41 USD per day. Heterosexual respondents made an

average of 125 USD per day and non-heterosexual participants of 91 USD per day. However, we suggest that these differences might be a result of extreme values; for instance, there was a heterosexual cisgender man who reported a daily rate of over 900 USD.

5.2.3 Crediting (CRE)

According to participants' responses concerning whether they were properly credited, the percentage of cisgender men who reported being *almost always* properly credited or being properly credited *most of the time* was 1.2 times as much as that of cisgender women. No cisgender men reported being *rarely* properly credited or *almost never* credited. 19.1% ($n=4$) of cisgender women reported being *rarely* properly credited or *almost never* properly credited. Three trans/non-binary respondents reported being *almost always* properly credited, *sometimes* properly credited or *almost never* credited respectively. We did not find significant difference among respondents with different sexual orientation (SOR), migration status (MIG) or age (AGE).

5.2.4 AES membership

84% ($n=42$) of the respondents had never been a member of the AES. None of the demographic categories we tested were significant predictors of AES membership. Reasons for not being an AES member provided by respondents included not having applied, not being interested in joining AES, not being able to afford a membership, and not knowing what AES is. For respondents who were former members of AES but no longer active, none of them explained why. Only 2 current AES member were aware of the AES D&I committee.

5.3 Microaggression statistical analysis

5.3.1 Gender (GEN)

We found that gender had large and medium effects upon aggregate scores for all microaggression factors (Table 2). Four microaggression factors displayed large effect sizes for GEN: Silenced and Marginalized (SAM, $\eta^2 = 0.831$), Age-based Workplace Microaggressions (MAGE, $\eta^2 = 0.844$), Sexual Orientation-based Workplace Microaggressions (MSOR, $\eta^2 = 0.458$), and Cultural Workplace Microaggressions (MCUL, $\eta^2 = 0.402$). Two microaggression factors displayed medium effect sizes: Assumptions of Beauty and Sexual Objectification (SOB, $\eta^2 = 0.066$) and Gender Workplace Microaggressions (MGEN, $\eta^2 = 0.082$). Stereotyped (STE, $\eta^2 = 0.004$) displayed a small effect size for gender.

The aggregate scores of SOB, SAM, STE, MGEN, MAGE and MSOR for cisgender women were significantly higher than those of cisgender men. Note that there were no trans/non-binary respondents who filled out the microaggressions portion. Cisgender women also reported experiencing more MAGE microaggressions compared to other types of respondents.

5.3.2 Other social factors

Only 4 non-heterosexual respondents provided

Table 3. Comparison with Yang&Caroll's study

Percentage of women respondents whose answers within a microaggression factor resulted in an average of ' <i>Neither agree or disagree</i> ' or over				
Study	SOB	SAM	MGEN	
Yang&Caroll	31%	47%	44%	
Current	15.4%	46.2%	20%	
%Difference	-15.6%	-0.8%	-24%	
Percentage of women respondents who answered at least once ' <i>Agree</i> ' or above within a microaggression factor				
Study	SOB	SAM	STE	MGEN
Yang&Caroll	73%	76%	76%	68%
Current	46.7%	86.7%	46.7%	66.7%
%Difference	-26.3%	+10.7%	-29.3%	-1.3%

answers to the corresponding questions. There was no microaggression factor significantly associated with SOR. Though there was no significant difference between respondents who had migrated (whose countries of residence differ from their countries of birth) and those who had not migrated in their experiences of Culture Workplace Microaggressions (MCUL) or other microaggressions, the average score of migrated respondents for the microaggression factor MCUL is higher than that of the non-immigrants. Age had no significant association with microaggressions factors SOB, SAM, STE, MGEN, MAGE, MSOR and MCUL. However, the average scores of the respondents between the age of 20 and 30 for the microaggression factors SAM and MAGE were higher than that of the respondents over the age of 30.

5.4 Comparison with other studies

We compared our findings with those obtained by Yang and Carroll [2] and Brooks et al. [1]. It should be noted that our survey employed a 5-point Likert scale ranging from *Strongly disagree* to *Strongly agree* and Yang and Carroll's [2] study employed a 7-point scale on the same range. Their score of 4 (*Neither agree nor disagree*) corresponds with our score of 3 (*Neither agree nor disagree*). In general, we found that cisgender women from our sample reported experiencing fewer microaggressions and less discrimination than cisgender women working in STEM academia. Specifically, 24% less cisgender women working in the studio responded with an average of *Neither disagree nor agree* or over for *disagree nor agree* or over for microaggression factor MGEN, and 15.6% less for SOB, while they were around the same level for SAM. Also, 26.3%, and 29.3% less of the cisgender women from our research experienced at least one or more microaggressions from factors SOB and STE. Nevertheless, 10.7% more cisgender women reported experiencing microaggressions from the factor SAM in our research compared with those in the STEM study (Table 3).

While comparing our significant findings against the international survey [1], we found that there are fewer microaggression factors which displayed significant effects for demographic categories SOR, AGE and MIG. Similarly, gender is the strongest predictor of experiences of discrimination and microaggressions

in the recording studio, having large, medium and small effects for all microaggression factors. Meanwhile, all the *p* values calculated in our statistical analysis are higher than those from the international survey.

5.5 Qualitative analysis

5.5.1 Credits

When analyzing the responses to open-ended questions, we identified three leading causes of erroneous credit, namely Not being recognized, Oppression in the workplace, and Unprofessional workflow. It appears that being unrecognized is the most prominent factor as it was mentioned by 14 respondents. Under this category, 9 people stated that they were not recognized because they were not songwriters or merely assistants. For instance, respondents from China stated, "some types of works just list the composer and lyricist, with no other contributors to the music"; and "As an assistant, I don't deserve it". One Japanese respondent said it is because he was revising the mix for the producer: "If you are involved in correcting a song, it is unlikely you will be credited". In addition, there is evidence that clients did not recognize the audio engineers' contribution adequately. For example, one respondent said, "clients have a low level of awareness of music production staff other than songwriters and treat me as a general technical person".

Three respondents said that their superiors stole their credits, such as the respondent who expressed "my boss wanted to credit in his name, I'm just a ghost producer". Three people explained that they were not acknowledged since they were not part of a formal production team, which we coded as unprofessional workflow.

It can be concluded that the music industry's unprofessional and unhealthy workplace prohibits contributors from getting credits. However, as the majority of data (*n*=15) in this case was from Chinese respondents, we consider this conclusion to be more representative of China compared to Japan (*n*=3) and South Korea (*n*=0).

5.5.2 Working conditions

We coded the answers from 46 respondents into eight categories, namely Remuneration, Job opportunities, Mental charge, Working time, Law, and Personnel management. 39.1% (*n*=18) of respondents expressed their wish to have higher salaries and proper allowances. 26.1% (*n*=12) of respondents mentioned that they wanted more and equal opportunities in the music industry in the future with less cut-throat competition and a standardized recruitment system. 21.7% (*n*=10) of respondents stated that they wish to gain more respect from their clients. 20% (*n*=9) of people claimed to be overworked and they wished to have more reasonable working hours. In terms of the laws, 6 professionals were concerned about having access to stronger royalty and copyright laws. For example, one participant said, "In Japan, the person in charge of the production is actually called 'arranger', not 'producer'. Arrangers usually get paid

only once with a buyout track fee and are not allowed to insist on receiving any royalties (for either composition or publishing.) Even writers cannot hold any percentage of publishing in this country. This must be changed”. Combining the results of the no-miss credit for Korean respondents, the data suggests that Korea may have a more regulated copyright system.

Four respondents mentioned that the physical working environment could be better such as having better equipment and independent working space. Three respondents hoped to “improve the nationwide music education in mainland China” and have more online sharing resources. Furthermore, there appears to be an issue of personnel management, with three respondents holding the opinion that there should be a more precise and detailed division of labor. In general, our data shows that music producers, audio engineers and studio assistants in East Asia are in a socially disadvantageous position.

5.5.3 Microaggressions

There were only 10 comments about questions concerning microaggressions. Eight of the 10 respondents have experienced microaggressions. We identified 2 cases of microassaults, 5 microinsults, 5 of microinvalidation based on gender, and 1 case of microassault based on sexual orientation. A Chinese heterosexual cisgender woman stated, “When I was in a recording studio in the US, I would often suggest a small change that was not accepted, and then a little later another man (not necessarily because of gender, of course, as that other man was a little older and more experienced than me) would say something identical to what I had just mentioned (it wasn't a matter of my language, either; my English was very good), and it was immediately accepted. When I was working in China, I was often asked if I was an assistant”. This experience that took place in the US reveals the microinvalidation because she was silenced and ignored as part of a marginalized group in a recording studio. In her later experiences in China, she was presumed to be an assistant. This was coded as a microinsult because she experienced being stereotyped around the idea that females cannot perform technical jobs well. One respondent even expressed that “I feel being marginalized...but the environment influences even me. When I watch YouTube videos, I tend to watch instructional videos by male producers”. This shows a tendency towards internalized sexism. Moreover, 2 respondents mentioned the issue of sexual objectification and they didn't want others to focus on their appearances with comments such as good-looking and look like a boy.

Apart from gender, age and seniority were also cited as significant characteristics contributing to microaggressions. A Chinese heterosexual cisgender male suggested, “As a junior engineer, I was asked by a senior engineer/studio owner/employer (the same person) to clean, brush the toilet, and [do] some other non-career-related matters, and was blamed for nothing, just because the person was in a bad mood. [...] In this environment, there is clearly a class

oppression and the person at the bottom of the hierarchy is the one being oppressed”. We believe this response incorporates all three types of microaggressions because his superior purposefully asked him to brush the toilet, even though there were actual cleaners. Also, the boss believed the junior should be subservient in a toxic work environment. The respondent felt invalidated because his experiences at the workplace negated his value as an engineer.

Last but not least, there is one result which was coded into age and seniority. It is also associated with cultural background. One respondent articulated, “Most of my musical career was made in Los Angeles and Korea, and I have had experiences of working with people who were much older than me in both places. Culturally, age is very important in Korean society, therefore, in Korea, sometimes there were times when I would speak up my opinions less when working with others who were much older than me”. Additionally, one participant noted that music genre-based microaggressions happened between a film scorer and an electronic musician.

6 Discussion

6.1 Oppressions in East Asian studios

Our statistical results indicate that gender is the most visible factor that causes social inequalities and microaggressions in the East Asian recording studios, and the qualitative results suggest that age and seniority are also non-negligible influencing factors on the respondents' experiences of microaggressions. They show that recording studios have been a toxic workplace for women, trans/non-binary people, non-heterosexual people and younger people. They have been mistreated by being undervalued, neglected and being the subject of stereotyping about their appearance and working abilities. These reveal the “masculine culture” in recording studios that force the marginalized group to develop a “thick skin” to survive [6] while experiencing discrimination. Influenced by such culture, there is also an “internalized sexism” [36] which appears to affect women's attitudes to gender inequalities. For example, some women respondents had sexist views towards women and themselves. This culture may lead to a “lack of confidence, competition, and a sense of powerlessness” [37].

The presence of gender imbalance seems to be undermined by the fact that the questionnaires are so close in proportion to men and women. However, the results show that women in studio are more likely to have lower status than men in terms of working type. They are constantly being mistreated and pushed out of the industry [38]. Other inequalities involve junior audio engineers receiving high levels of oppression from their superiors, including ghost production and being asked to do jobs outside of their roles as engineers. Additionally, their clients in general have insufficient knowledge of the role and importance of production teams in the East Asian music industry. Within the industry, however, the chain of contempt around certain music genres contributes to social

inequalities by stigmatizing certain music cultures, for example, EDM groups [39]. Further, as an “informal industry”, the phenomenon of vicious price competition also leads to unfair treatment and undermining of the values of professionals [6].

6.2 The hidden cultural influences

The cultural and social contexts are very different in East Asia compared to Western countries. As suggested in the literature, people in East Asia, especially women, are greatly influenced by the remnants of Confucian values and other societal norms in which women are typically cast into the role of home-based wives and mothers. This gender stereotyping results in lower social status and levels of economic participation of women [40]. Fitting in with the Confucian values paradigm, our findings indicate that gender is strongly associated with experiences of discrimination and microaggressions, particularly the microaggression factor Silenced and Marginalized (SAM). Our findings also suggest that gender has a significant effect on experiences of workplace microaggressions around age.

Women in East Asia are not only constrained by heteropatriarchal norms as mentioned in the literature, but also required to be extra cautious about proper behaviors in social interactions. In East Asia, the interaction between gender and informal social networks plays an extremely influential part in the representation of employees in the workplace. It is vital for employees to rely on access to the informal social networks for anything to be achieved within the organization. There is a strong type of social connection called *guanxi* in China, and it's impacted by the traditional cultural values which put great emphasis on hierarchy and respect towards senior members. A successful career and business-based survival and prosperity rely on this personalised dyadic social tie. Hence, the dark side of this informal social network can result in a lack of opportunities and exclusion from the corresponding information exchange process for outgroup members, usually women and younger people. Similarly, there are *Yongo* ties in Korea, which are used to get access to specific information, job promotion or preferential treatment. In accordance with Confucian ethics, *Yongo* ties are also extremely hierarchical [41]. In Japan, *Jinmyaku* is vital in politics and business and is significant in various aspects of social life [42]. Women are considered as an outgroup. This glass-ceiling phenomenon has prevented many of them from reaching equivalence to men.

The descriptions from the respondents in our survey also detailed the fact that there's a tendency towards an age-based hierarchical culture, which can silence people. On average, younger respondents are more likely to experience microaggressions around age than older respondents. Moreover, the East Asian culture puts great emphasis on looking up to the elders and those who are more experienced, especially in the valued social interactions and networks. If a senior demands a favor, then the junior member must grant him the favor [42].

Despite our findings demonstrating that women in East Asian studios are in a disadvantageous situation, facing different types of inequalities, the percentage of women reporting experience of discrimination and microaggressions is much lower compared with the findings of the STEM study and the international survey. In our survey, most respondents were unwilling to answer the microaggression portion of questions or chose the option of ‘prefer not to say’ in certain questions about discrimination and microaggressions. The combination of the strings of social interactions and the pressure exerted from seniors makes it more difficult for women and younger people in East Asia to find their own positions in workplace. Combined with the fact that most of our respondents were young people between the ages of 20 and 30, we speculate that some respondents might have chosen not to reveal their experiences due to a fear of getting into trouble and disturbing their interactions within the industry, which led to a low percentage of disclosure of experiences of microaggressions in our survey.

6.3 Limitations

In this survey, we examined the social inequalities facing studio professionals in East Asia. Nevertheless, this study has its limitations. Due to the insufficient recruitment of respondents, the experiences of studio professionals from Japan and South Korea might be underrepresented. As an all-Chinese research team of cisgender women, it is important to examine this limitation of our research. Additionally, most people from East Asia lack clear recognition of social inequalities, especially of microaggressions and the influences of the complexities of cultural factors and social norms. Moreover, most of the respondents were young producers between the age of 20 and 30, and future research should include more respondents of different ages and with diverse experiences of the job. Meanwhile, more people from other minority groups such as gender-non-conforming people should be included in future research to depict a broader picture of the situation in the East Asian music industry.

7 Conclusion

In conclusion, this study investigated the social climate, working conditions and microaggressions within East Asian recording studios. We discovered that the toxic working environment has negatively affected the remuneration, opportunities, and client recognition of music producers, sound engineers and studio assistants. In addition, social challenges such as limited music education, underdeveloped copyright law and seniority-based workplace hierarchy in East Asian society are also revealed in this research.

During the course of data collection, some respondents mentioned the value of this research, stating that they had never heard of the concept of microaggression, and they thought it may be worth discussing. But there were also voices depreciating the research and saying, “I don't think it's necessary to do this”. Receiving all sorts of comments, we argue

that the research results speak for themselves, and this research can surely raise people's awareness of social inequalities in East-Asian recording studios.

Admittedly, much work remains to be done in revealing microaggressions and social inequalities in East Asian recording studios, and solutions to these problems need to be found, as they have not been adequately addressed by either academics or the public. However, we do hope that this study will shed light on the sociocultural investigation of the recording industry in East Asia and spark more research in this area.

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