## Chapter V

## Analysis

## 1. Introduction

As an international student who has been living in the United States for seven years, I am often asked where I came from, why I chose America, when I got married, and if my husband is Chinese as well. I am never offended by these questions; instead, I am interested in their motivations for asking these questions, and I have chances to see myself as an immigrant from the perspective of Americans. I can see myself becoming an immigrant mother in the future and as a photojournalist, I sometimes feel that photographers are unable to cover every aspect of an immigrant woman, especially when they are making long-term photo stories. When motherhood is part of the story, photographers tend to focus only on the aspect of immigrant women being mothers while ignoring their other roles and identities.

I started to realize this phenomenon when I worked as a staff photographer for the Columbia Missourian and photographed immigrant subjects. I felt that while some photographers may have the intention of documenting immigrant mothers from several different aspects, they often emphasize a stereotypical icon or a particular time (for example, common stories such as "how immigrants are living under the pandemic" or "how the proportion of immigrant workers dropped during 2019 to 2021"). To test whether photographers stereotype immigrant mothers and ignore their other social roles, I decided to devise a study using photo stories and participant photographers.

In order to find out if photographers really do ignore parts of an immigrant mother's
life in their photo stories, I designed a study that utilizes photo projects and questionnaire-based research. If photographers can recognize a pattern of stereotyping immigrant women via my project and study, my findings should tell them what the elements are that they should have focused on.

To begin, I spent three and a half months documenting my selected subject Shenghua Sinkler, and I created a photo book of 25 images as the foundation of my study. This project, "Walks Before You," depicts a Chinese mother who is now living in the United States. I selected a second project, Marco Postigo Storel's "In Between Cultures," which depicts a Syrian mother who is now living in Brazil. Participants (photographers) were required to see these two projects and answer the same set of questions.

I sent participants a Qualtrics survey with two parts. First, they answered a demographic questionnaire to gather data and determine if they were qualified for the study of professional or student photographers (gender, age, race, job, income from photography, time spend each day as a photographer). Then, they were given a website link to my project before they answered the 13 project-related questions. They would complete the exact same process for the second project. The two sets of data were then compared to show specifically whether or not photographers are ignoring other identities of an immigrant mother, such as their participation in their own communities or workplaces, and which roles they have seen in the first photo project but not in the second one, and vice versa. Indeed, 41 qualified participants gave answers on the 7point numerical scales.

## 2. Finding Reports and Conclusions

The first inquiry of gender distribution shows that $65.85 \%$ of participants are female, and $31.71 \%$ of participants are male (Table 1), which means that the answers that I am expecting to get will lean more toward a female perspective. I got responses from 4 major race groups: Asian, white people, African Americans, and Latinos. More than 65\% of participants are news photographers, sports photographers, photo editors, etc.

My first three questions were designed to evaluate whether participants understood the general storyline. Participants agreed on how much time the two subjects spent with their children and that there were about 3 to 4 life roles they could perceive, although they had controversial opinions on how many roles I documented. Participants agreed that there were about 3 minor subjects other than the two mothers. This result is also reasonable because Shenghua's family has 3 other family members, and AlOmair has two daughters. Overall, the responses that I gained for comprehensive questions met my expectations. The data information clearly showed that my participants understood the general story idea and were clear about who appeared to be the main characters of the stories.

Questions 4-6 inquired whether participants agreed with the roles and identities that have been presented in those two projects and whether photographers introduced their subjects in proper ways. Responses show that participants generally agreed on the fairness of the presentation of these subjects. Furthermore, participants agree that both photographers have shown some obvious and strong connections between two mothers and their other family members. Question 6 responses show that participants have
different opinions on "what defines a woman's role outside of the family." Participants perceive more from In Between Cultures because AlOmair is religious. Features such as the Bible and her routine of praying added powerful hints for the dynamics of her roles.

Overall, this part of the data shows that participants are generally satisfied with how these roles have been presented and that the depiction of these two mothers' relationships with others meets their expectations. However, I found that participants seem to have some trouble defining "subject's positions in her related communities" because of the high standard deviation values for both projects (see practical data in section 3). Presumably, this is because participants can view the proof of subjects having community-related activities, but they never truly and practically see the documented photos of these specific communities.

Responses to questions 7-9 can show whether participants are "passively" ignoring the roles of immigrant mothers while observing their lives. In other words, these questions determine whether these photographers are the ones who (intentionally or unintentionally) choose to neglect those roles while documenting them. Responses to question 7 showed that participants are polarized when viewing Shenghua's story. One accountable prediction is that participants reviewed more images but received less perceivable roles for Shenghua. Responses to question number 8 show that participants are generally satisfied with the photographers' access, and it shows that more images can somehow decrease participants' satisfaction, perhaps because they think access can be pushed further. Question 9 asks participants if they found
captions, introductions, and other details to be helpful in understanding the subject. It is interesting to see that participants are excited about all the different roles that an immigrant mother has because combining responses for Q4-6 and Q7-9, participants are seeking more on how these mothers participate in their communities while simultaneously being satisfied with what photographers have portrayed. This demonstrates an expectation of exploring more of the subjects' identities. Also, participants have a firm standard on each story, and they know what they are looking for in regard to numbers of images.

The set of questions 10-13 is the most important component of the survey because it inquires how photographers view the roles and identities of immigrant mothers in the most direct way and connecting them to the social spectrum. According to responses to question 10 , participants tend to believe that I have presented more stereotypical images of women than the project In Between Cultures. It is also very interesting that male participants say they perceived more stereotypical images than female participants for both projects, considering that there are more female participants than male participants. Responses to question 11 show that most participants agree that my project can represent the minority group of immigrant mothers in the United States, and the data appears to be neutral on Marco's project due to the objectivity of his subject's nationality and status of living.

Responses show that participants seem to have some trouble understanding every social identity of this subject. I predict that participants did not perceive enough social identities throughout the whole project. The same thing happened on the project In

Between Cultures. The final question asks how many additional important aspects should have been incorporated in both projects. More female participants asked that more important roles be incorporated than male participants for both of these projects. Female photographers are more sensitive to the diversity of roles of immigrant mothers, and it is highly possible that they make additional connections between their own feelings and subjects' standpoint.

## 3. Results

This result meets my general expectation because I do believe that photographers can sometimes neglect the roles of the subjects that they portray. I have also learned that photographers have certain expectations before they see the actual story; as my colleagues, they are willing to use what they have experienced to picture what the photo project would potentially be (which appears in V1-V3). Also, they can definitely separate their subjective feelings from the objective representations presented by photographers. Most importantly, both male and female participants agreed that the producers of these two projects need to incorporate more roles into the photo story. Meanwhile, female participants relate more to these subjects. The most important findings are summarized in the following points:

- Photographers tend to capture 3-4 roles on average for an immigrant mothercentered photo project. This met my expectations and can be clearly presented by the results from questions V1-V3.
- Viewers may have trouble defining the subject's roles in photo projects if the visual elements are not elaborated well. It appears that viewers are actively
seeking visual hints, but they can feel disappointed when the story does not go deeper.
- Photographer's choices can influence the presentations of the subject's roles. Participants' emotions vary greatly according to how subjects have been presented. These results strongly suggest that photographers are responsible for delivering and sculpturing the proper emotional atmosphere.
- Female photographers are more sensitive to the diversity of roles of immigrant mothers. It appears that female photographers can relate themselves with depicted characters and make necessary connections between their feelings and the subjects' feelings.

Furthermore, the data shows that a selected group of photographers can represent the general population, but the results are not flawless. Since I only collected 41 qualified responses, there is a possibility that the results are extreme or inaccurate. However, it powerfully demonstrates the expectations from photographers of viewing more relevant subjects and more diverse symbols.

A very important question which I should have incorporated in my survey is "are you satisfied with the numbers of images in this specific project?" I realized that responses could vary according to the number of photos, as numbers can objectively determine how much information they can gain. I think this should be something for every photographer to consider for future stories.

It is important to view responses from male participants and female participants separately. I found that male participants are more willing to distinguish between roles
while observing a female character; however, female photographers have the tendency of reducing the stereotypical icons that they have in common with those observed characters. Moreover, male participants have a stricter standard on the quality of photo stories and photographers' photographic techniques (see table 6.1) than female participants, while female participants are stricter on the variety of subjects 'roles that have been portrayed.

Last but not least, I think that photographers have the intention of discovering missing roles of subjects, even though the result shows that they do ignore immigrant mothers' other roles. I think that participants are more active on the side of exploring roles than I expected. This is a positive phenomenon. I hope that this analysis according to my research design can inspire photographers, especially those who are in my peer group.

## Appendix: Data Analysis and Charts

The two major types of data that I am using to analyze participants' responses are the mean value (referred as M hereafter) and standard deviation (referred as SD hereafter). M values of each question can show which range that the data fall into and presents the general tendency of attitudes on specific questions. SD values of each question can show whether the attitudes or opinions on one question are polarized, and presents how big that variation is. Since the SD value relatively changes according to the particular scales of a survey; according to my survey design, there are 7 scales for all questions, so a $0.5+$ difference of SD value of two sets of data on the same question would be considered as big or unable to tolerate. (this is helpful)

There are 13 questions (referred as V1-V13 hereafter) for each photographer. I compared two sets of data for all same questions individually. N will represent the number of valid responses (41).
V1. In your opinion, what percentage of the subject's daily life is spent on taking care of her children?
$0 \%-15 \% \quad 15 \%-30 \% \quad 30 \%-45 \% \quad 45 \%-60 \% \quad 60 \%-75 \% \quad 75 \%-8585 \%-100 \%$
$\boldsymbol{V} 2$. In your opinion, how many different roles have been presented of the subject? (including her role as a mother)
$\begin{array}{lllllll}0-1 & 1-2 & 2-3 & 3-4 & 4-5 & 5-6 & 6-7\end{array}$
V3. In your opinion, how many minor subjects (including her children) that are important to the subject have been captured in this project?
$\begin{array}{lllllll}0-1 & 1-2 & 2-3 & 3-4 & 4-5 & 5-6 & 6-7\end{array}$
For project Walks Before You, $\mathrm{M}(\mathrm{V} 1)=4.49, \mathrm{SD}(\mathrm{V} 1)=1.42$; for project In Between
Cultures, $\mathrm{M}(\mathrm{V} 1)=3.63, \mathrm{SD}(\mathrm{V} 1)=1.37$. When $\mathrm{N}=41$, participants agreed that V 1 for both projects displayed the average time that an immigrant mother spend on their children was $30 \% \leqslant \mathrm{t} \leqslant 60 \%$.

[^0]V2 inquires how many different roles of the subject that participants could perceive from each project. For project Walks Before You, M(V2)=3.8, $\mathrm{SD}(\mathrm{V} 2)=1.55$ (Table 5.3); for project In Between Cultures, $\mathrm{M}(\mathrm{V} 2)=3.12, \mathrm{SD}(\mathrm{V} 2)=1.21$ (Table 5.4). When $\mathrm{N}=41$, project Walks Before You receives a higher SD (>1.5).

V3 inquires how many minor subjects (such as children, husband, friends, colleagues, etc.) have appeared in both subjects. For project Walks Before You, $\mathrm{M}(\mathrm{V} 3)=3.78, \mathrm{SD}(\mathrm{V} 3)=1.35$; for project In Between Cultures, $\mathrm{M}(\mathrm{V} 3)=3.15$,
$\mathrm{SD}(\mathrm{V} 3)=1.44$. When $\mathrm{N}=41, \mathrm{M}$ appears to be lower, and choice of " 2 " got the highest choice count. about $31.71 \%$.

V4. Do you think that the subject's identities and roles have been fairly presented through this project?
Strongly Disagree Disagree Almost Disagree Natural Almost Agree Agree Strongly Agree
V5. Do you think that the subject's relationships with other minor subjects who appeared in the project have been fairly presented through this project?
Strongly Disagree Disagree Almost Disagree Natural Almost Agree Agree Strongly Agree
V6. Do you think that the subject's positions in her related communities (such as church, public organizations, etc.) have been fairly presented through this project?
Strongly Disagree Disagree Almost Disagree Natural Almost Agree Agree Strongly Agree

V4 for project Walks Before You, $\mathrm{M}(\mathrm{V} 4)=5.2$ (Agree), $\mathrm{SD}(\mathrm{V} 4)=1.2$ (Table 5.7); for project In Between Cultures, $\mathrm{M}(\mathrm{V} 4)=4.54$ (Somewhat Agree to Agree), $\mathrm{SD}(\mathrm{V} 1)=1.36$.

For project Walks Before You, M(V5)=4.98 (Agree), SD(V4)=1.37 (Table 5.9); for project In Between Cultures, M(V5) $=4.49$ (Somewhat Agree to Agree), $\mathrm{SD}(\mathrm{V} 1)=1.23$
(Table 5.10). Generally speaking, with a 0.14 SD difference, V5 showed that participants were fundamentally satisfied with the relationship depictions.

For project Walks Before You, $\mathrm{M}(\mathrm{V} 6)=3.76$ (Neither Agree nor Disagree to

Somewhat Agree), $\operatorname{SD}(\mathrm{V} 6)=1.56$; for project In Between Cultures, $\mathrm{M}(\mathrm{V} 6)=4.41$
(Somewhat Agree to Agree), $\mathrm{SD}(\mathrm{V} 6)=1.58$.

## V7, V8, and V9:

V7. Do you feel satisfied with how this photographer portrayed the subject overall? Extremely Dissatisfied Moderately Dissatisfied Slightly Dissatisfied Neutral Slightly Satisfied Moderately Satisfied Extremely Satisfied
V8. According to the accessibility that the photographer got with the subject, do you feel satisfied with the photographer's choices to photograph in the various settings, events, and situations?
Extremely Dissatisfied Moderately Dissatisfied Slightly Dissatisfied Neutral Slightly Satisfied Moderately Satisfied Extremely Satisfied
V9. Do you feel satisfied that the additional information provided by the photographer (such as the introduction, captions, necessary credits) which helped you to know more about the subject?

V7 shows that for project Walks Before You, $\mathrm{M}(\mathrm{V} 6)=4.66$ (Slightly Satisfied to Moderately Satisfied), $\mathrm{SD}(\mathrm{V} 7)=1.78$; for project In Between Cultures, $\mathrm{M}(\mathrm{V} 7)=4.73$
(Slightly Satisfied to Moderately Satisfied), $\mathrm{SD}(\mathrm{V} 7)=1.36$.

V8 for project Walks Before You, M(V8)=5.24 (Moderately Satisfied to Extremely
Satisfied), $\mathrm{SD}(\mathrm{V} 8)=1.65$; for project In Between Cultures, $\mathrm{M}(\mathrm{V} 8)=4.83$ (Slightly
Satisfied to Moderately Satisfied), $\operatorname{SD}(\mathrm{V} 8)=1.17$.
V9 for project Walks Before You, M(V9)=5.61 (Moderately Satisfied to Extremely

Satisfied), $\mathrm{SD}(\mathrm{V} 9)=1.38$; for project In Between Cultures, $\mathrm{M}(\mathrm{V} 9)=5.07$ (Slightly

Satisfied to Moderately Satisfied), $\operatorname{SD}(\mathrm{V} 8)=1.40$.

## V10, V11, V12 and V13:

V10. To what extend do you think that this project reflects stereotypical images of women?
Very Much Probably Some Possibly Some Neutral Possibly Not Probably Not Definitely Not
V. 11 To what extend do you think that this project represents the minority group of immigrant mothers in United States under the current social spectrum?
Definitely not Probably not Possibly not Neutral Possibly Some Probable Some Very much

V12. Have you clearly understood every social identity of this subject?
Definitely not Probably not Possibly not neutral Possibly Some Probably Some Very much
V13. How many additional important aspects should have been incorporated into the project that you think have been neglected?
Very many Probably Some Possibly Some Neutral Possibly none Probably none Definitely none

Two M values for V10 appear to be 2.98 and 4.24, which has a significant difference (Table 5.19 and Table 5.20). Responses of V12 shows the most polarized situation of my entire survey. SD values are 1.82 and $1.74, \mathrm{M}$ values are 4.34 and 4.0

V13 With M values 3.34 and 3.39, and SD values are both 1.34.

Based on my research question, I turned my hypothesis into a null hypothesis because this research involves statistical hypothesis testing. So, my hypothesis appears to be:
$\mathbf{H}_{0}$ : Photographers (participants) do not ignore the social roles (other than the role as a mother) of an immigrant woman when their role as mothers is clearly communicated.
$\mathbf{H}_{1}$ : Photographers (participants) do ignore the social roles (other than the role as a mother) of an immigrant woman when their role as mothers is clearly communicated.

I used the Chi-Square testing method to evaluate my results. Basically, the ChiSquare test gives values of Chi-Square statistic, which reflects whether the sample data matches and represents the general population (photographers). It predicts whether data is closely related with my hypnosis, and how intimate this relationship is reflected by statistics. For this project specifically, two Chi-Square statistics (two values) are calculated separately for two projects. The formula of the Chi-Square statistic is $x=$ $\sum \frac{\left(O_{i}-E_{i}\right)^{2}}{E_{i}}$ (O represents the observed values of participants and E represents expected
values). According to the Chi-Square table of project Walks Before You (referred as P1 hereafter), x of P1 equals to 24.42 (Table 3.P1), for the project In Between Cultures (referred as P2 hereafter), x of $\mathbf{P} 2$ equals to $\mathbf{2 0 . 3 4 4}$ (Table 3.P2).

| Participants/Category | Observed Values (Project 1) | Expectation Value |  | Residual=(Ob | bs-Exp) | $($ Obs-Exp)^2 | $($ Obs-Exp)^2/Exp |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 |  | 0 | 3 |  | -3 | 9 | 3 |
| 2 |  | 1 | 4 |  | -3 | 9 | 2.25 |
| 3 |  | 3 | 6 |  | -3 | 9 | 1.5 |
| 4 |  | 14 | 10 |  | 4 | 16 | 1.6 |
| 5 |  | 18 | 8 |  | 10 | 100 | 12.5 |
| 6 |  | 5 | 7 |  | -2 | 4 | 0.571428571 |
| 7 |  | 0 | 3 |  | -3 | 9 | 3 |
| (Table 3.P1) |  |  |  |  |  |  |  |
| Participants/Category | Observed Values (Project 2) E | Expectation Value | Residual=(Obs-Exp) |  | (Obs-Exp) ${ }^{\wedge} 2$ | (Obs-Exp)^2/Exp |  |
|  | 10 | 3 | 3 | -3 |  | 9 | 3 |
|  | 20 | 4 | 4 | -4 |  | 16 | 4 |
|  | $3 \quad 6$ | 6 | 6 | 0 |  | 0 | 0 |
|  | 4 - 16 | 10 |  | 6 |  | 36 | 3.6 |
|  | 5 15 | 8 | 8 | 7 |  | 49 | 6.125 |
|  | 6 3 | 7 | 7 | -4 |  | 16 | 2.285714286 |
|  | 7 1 | 3 | 3 | -2 |  | 4 | 1.333333333 |

(Table 3.P2)

The calculation of P value tells me if my null hypothesis is valid or not. It takes my calculated Chi-Square statistics, and the degree of freedom, which is the probability that my current data could possibly incorporate (usually calculated by the numbers of categories minus one). With these two Chi-Square statistics, and DF (degrees of freedom) $=7-1=6$, I inserted the values into the Chi-Square Distribution Table, both of the $\mathbf{P}$ values are around somewhere $<\mathbf{0 . 0 0 5}$. It shows that I have less than $\mathbf{0 . 5 \%}$ chances of accepting $\mathrm{H}_{0}$, and I should accept $\mathrm{H}_{1}$.

(Table: Career)

$\square$ male female prefer not to answer
(Table 1: Gender Distribution)

(Table 2: Age Distribution)

(Table 3: Race Distribution)

(Table 4: Career Distribution)
"In your opinion, how many different roles have been presented of the subject? (including her role as a mother)"

Q2 - In your opinion, how many different roles have been presented of the subj... Page Options $\checkmark$

(Table 5.3:V2-1 Yanchen)

Q27 - In your opinion, how many different roles have been presented of the su... Page Options $\sim$

(Table 5.4:V2-2 Marco)

(Table 5.7: V4-1 Yanchen)

(Table 5.8:V4-2 Marco)

(Table 5.9:V5-1 Yanchen)

(Table 5.10:V5-2 Marco)F

(Table 5.19:V10-1 Yanchen)

(Table 5:20: V10-2Marco)
"How many additional important aspects should have been incorporated into the project that you think have been neglected?"

(Table 5.23:V13-1)

(Table 5.24: V13-2)
(Table 6.1)


[^0]:    "In your opinion, what percentage of the subject's daily life is spent on taking care of her children?"

