CHAPTER 1
INTRODUCTION

1.1. Background

Based on the datas acquired through the International Survey on Aesthetic/Cosmetic Procedures 2020 by International Society of Aesthetic Plastic Surgery (ISAPS), there were 10,129,528 aesthetic plastic surgery procedures done globally. The most procedures done were breast augmentation, liposuction, eyelid surgery, rhinoplasty, and abdominoplasty, respectively. This statistical numbers show that the plastic surgery procedures are still in high demand, despite of the COVID pandemic. Pandemic situation coerced the plastic surgery services to be adjusted due to increased health and safety precautions. Interestingly, the plastic surgery services were able to be maintained against all odds according to the data of ISAPS Global Survey 2020.

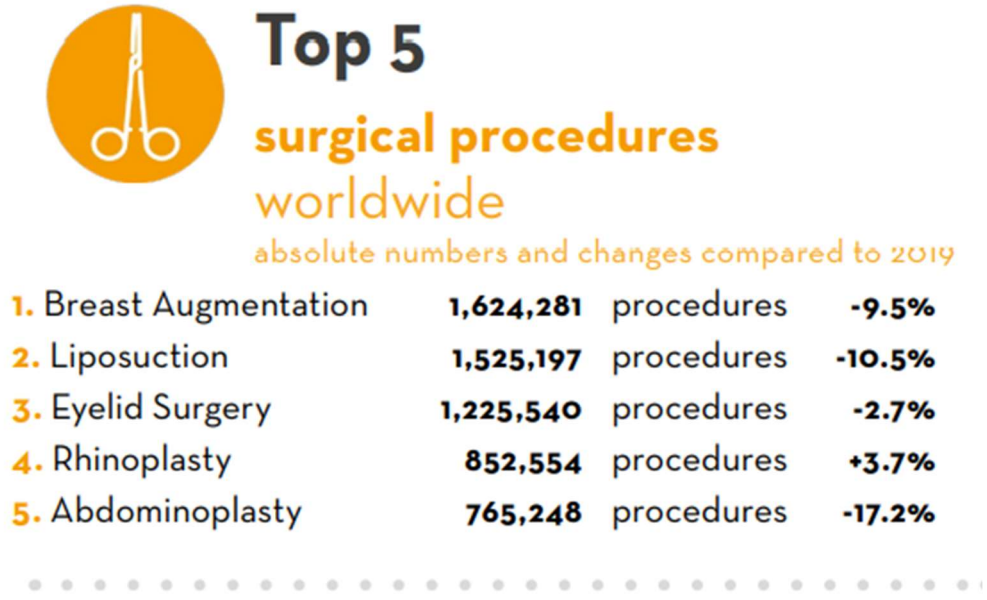

Figure 1.1 Top 5 plastic surgery procedures worldwide (ISAPS 2020)

As a practicing plastic surgeon, the researcher of this study feels intrigued with a few facts commonly faced in daily observation. While other specialty or subspecialty tend to decrease in cases during the pandemy, plastic surgery still has the tendency of high, if not higher, demand. This is shown in the table of procedures done worldwide in Table 1.1. The challenges of the "new normal" does not seem to differentiate much with the demand of plastic surgery. Some patients specifically asked to be surgically intervened during the pandemy. One of the reasons that they mention was that they can have more privacy and longer down time during the pandemy.

Rank	SURGICAL PROCEDURES	Total	Percent of Total Surgical Procedures	Total Procedures in 2019	Total Procedures in 2016	Percent Change 2020 vs. 2019	Percent Change 2020 vs. 2016
1	Breast Augmentation	1,624,281	16.0%	1,795,551	1,649,271	-9.5%	-1.5%
2	Liposuction	1,525,197	15.1%	1,704,786	1,453,340	-10.5%	4.9%
3	Eyelid Surgery	1,225,540	12.1%	1,259,839	1,347,509	-2.7%	-9.1%
4	Rhinoplasty	852,554	8.4%	821,890	786,852	3.7%	8.4%
5	Abdominoplasty	765,248	7.6%	924,031	769,067	-17.2%	-0.5%
6	Breast Lift	594,691	5.9%	741,284	583,192	-19.8%	2.0%
7	Fat Grafting (face)	515,819	5.1%	598,823	596,836	-13.9%	-13.6%
8	Breast Reduction	426,363	4.2%	600,219	465,665	-29.0%	-8.4%
9	Facelift	419,046	4.1%	448,485	427,065	-6.6%	-1.9%
10	Buttock Augmentation	396,105	3.9%	479,451	332,121	-17.4%	19.3%
11	Brow Lift	288,306	2.8%	270,917	261,663	6.4%	10.2%
12	Ear Surgery	254,931	2.5%	288,905	298,975	-11.8%	-14.7%
13	Neck Lift	251,308	2.5%	260,747	264,050	-3.6%	-4.8%
14	Gynecomastia	210,737	2.1%	273,344	236,371	-22.9%	-10.8%
15	Breast Implant Removal	206,826	2.0%	229,680	155,453	-10.0%	33.0%
16	Labiaplasty	142,119	1.4%	164,667	138,033	-13.7%	3.0%
17	Upper Arm Lift	126,030	1.2%	168,289	125,557	-25.1%	0.4%
18	Facial Bone Contouring	106,173	1.0%	108,536	109,775	-2.2%	-3.3%
19	Thigh Lift	73,948	0.7%	93,334	79,476	-20.8%	-7.0%
20	Lower Body Lift	71,007	0.7%	75,895	72,253	-6.4%	-1.7%
21	Buttock Lift	53,299	0.5%	54,894	37,157	-2.9%	43.4%
	TOTAL SURGICAL PROCEDURES	10,129,528		11,363,569	10,189,682	-10.9%	-0.6%

Table 1.1 Worldwide Plastic Surgery Procedures

Another interesting phenomenon is also snap an interest in the researcher's observation. Empirically, there are more and more new beauty clinics being set up every month with various service offered. Some of those clinics may survive, some may thrive, and some may fail. This fact sparks the researcher's curiosity. What are the qualities needed to have a successful plastic surgery clinic? How can a plastic surgeon run his or her clinic and have higher traffic of patients, better profitability, and more satisfied patients? If recommendation is what it takes to generate more

traffic of patients to the clinic, then how can the patients be willing to volunteer in recommending?

In search of an answer, the researcher found a study by Marsidi in 2014. Marsidi and coauthors revealed that the most preferred clinic would be those having a minimum of 10-year-experience plastic surgeon, less travel time, with 15% less cost. This seems as an interesting fact. But, to this study's researcher and also a plastic surgeon herself, those variables mentioned by Marsidi in 2014 feels incomplete. The researcher try to be more detailed in assessing the impacting variables specifically to patient's self-consciousness of appearance and the link to their likelihood to recommend.

The common physical beauty perceived mostly arises from facial appearance as well as the perception of body image. The concept of beauty keeps evolving and continuously being a challenge for plastic, reconstructive and aesthetic surgeons across the globe. In general, the art of plastic surgery is always directed towards normality of appearance and function. Patients who suffer from disfigurements and deformities are seeking for approximation of normal appearance and function, while those who are in a healthy condition are seeking for a better harmony in an aesthetic perspective (Harris et al, 2001). The interventions done through plastic reconstructive and aesthetic surgery procedures are intended to give relief from distress from psychological perspective and improvement in social as well as psychological functioning. Objectively, a tool is needed to evaluate the necessity of such clinical interventions. Moreover, the measurement of its therapeutic effectiveness is also needed. Therefore, a psychometric instrument is the valid and reliable tool to assess the specific problems of these patients.

Patient-reported outcomes (PRO) measures are questionnaires which quantitatively measures the health-related quality of life and/or other significant outcome variables from the patient's point of view. A good patient-reported outcome measure should determine the impact of disease, trauma, or surgical intervention on various aspects of a patient's outcome. It needs to be clinically meaningful, scientifically sound, and practical (Cano, 2009). In this research, we are adding a

mediating variable, which is the post-operative patient consciousness of appearance.

In the field of plastic surgery, a so-called “perfect result” may differ from the surgeon’s view and the patient’s. Therefore, data acquired from patient-reported outcome measures are essential. Firstly, it is needed for patient advocacy. To advocate for patients, scientific data are needed to show that surgery has a positive effect on quality of life. Second, the advanced surgical techniques requires data related to quality-of-life. Third, health care providers are increasingly expected to show successful patient outcomes to health care payers. Ultimately, providers having better patient outcomes with reliable data may receive greater reimbursements (Cano, 2009). Ultimately, in the perspective of business management, we need to explore the variables which can be modified in order to increase patients’ traffic to the clinic, their satisfaction, recommendation likelihood, and potential upscale of profitability.

The Derriford Appearance Scale (DAS59) has been structured to meet the need for an objective assessment of psychological distress and dysfunction. This is linked to characteristic of disfigurements, deformities, and aesthetic problems of appearance. It may be used in research and also clinical practice. The short form of 24 items, known as DAS24, is intended for a routine clinical assessment. This psychometric instrument is regarded as sensitive to measure of change following treatment for patients treated for facial features or bodily features. Moreover, it also potentially benefits the patient selection in both aesthetic and reconstructive plastic surgery and for outcome evaluation (Harris et al, 2001). In Table 1.2, it shows that consciousness of appearance is ultimately important in plastic surgery.

Table 2. Preoperative and Postoperative DAS59 Score Comparison[a]

Factor	Mean Appearance Score[b]			*P* Value
	Preoperative	Postoperative	Change	
Full scale[c]	81.2	62.9	−18.3	<.01
1. General Self-consciousness of Appearance	32.5	22.2	−10.3	<.01
2. Social Self-consciousness of Appearance	20.7	16.0	−4.7	<.01
3. Self-consciousness of Sexual and Bodily Appearance	9.2	8.2	−1.0	.04
4. Negative Self-concept	11.3	9.9	−1.4	<.01
5. Self-consciousness of Facial Appearance	4.2	3.4	−0.8	.01
6. Physical Distress and Dysfunction	2.3	1.6	−0.7	<.01

Abbreviation: DAS59, the 59-item Derriford Appearance Scale.[9]
[a] Using a paired *t* test.
[b] Scores are given as absolute numbers.
[c] The full-scale score includes 57 items (2 items measure physical distress and dysfunction and are not included in the scoring).

Table 1.2 Preoperative and Postoperative DAS59 score comparison

The challenging part of developing a patient self-reported outcome for things that are considered linked to the quality of life is how to determine the indicators included in the questionnaire. By referring to DAS59 and DAS24, the researcher of this study try to prioritize a few essential items and incorporate it to this research's questionnaire. Some items are listed below in the Table 1.3.

0 Did not apply to me at all
1 Applied to me to some degree, or some of the time
2 Applied to me to a considerable degree, or a good part of time
3 Applied to me very much, or most of the time

	Criteria	Score			
		0 Never	1 Sometimes	2 Considerable	3 Always
1	Feeling loss of Confidence				
2	Distress at Reflection				
3	Irritable at Home				
4	Feel Hurt, Feel Rejected				
5	Self Conscious of appearance				
6	Distress at Pubs Restaurants or Social events				
7	Misjudged due to appearance				
8	Feel incomplete masculine or feminine				
9	Felt I wasn't worth much as a person				
10	Adjust the hair if it flies or gets disturbed				
11	Adopt Concealing Gestures				
12	Difficult to work up the initiative to do things				
13	Tended to over-react getting upset by quite trivial situations				
14	Found others preferred over me for important assignments				
15	Felt sad and depressed sometimes				
16	Found myself getting impatient when I was delayed in any way (eg, lifts, traffic lights, being kept waiting)				
17	Could have done better with proper looks				
18	Felt that I had nothing to look forward to				
19	Found it difficult to relax				
20	Felt nervous in situations, with raised heart rate sweating or shaking feet				

Mild – 0 to 10, Moderate – 10 to 30, Severe – 31 to 50, Extreme – 51 to 60,

Table 1.3 List of items from Derriford Appearance Scale

When a patient realises his or her specific problem which may be modified within the field of plastic surgery, he or she will tend to browse for healthcare recommendation. Nowadays, patients have the tendency to look for an online

recommendation via social media or through testimonies of patients who have undergone a certain procedure previously in a hospital or clinic.

Another interesting phenomenon is that, empirically, patients tend to flock to certain plastic surgery clinics which seem to be properly organized by the management team. Creating a seamless flow of service by a group of management people with a set of specific service culture as well is certainly not an easy task to develop. It takes a multidimensional approach of medical and nonmedical perspective.

In the midst of the researcher's quest for answers, it becomes clear that it is not enough to just be a plastic surgeon. She needs to understand the management behind the whole service of plastic surgery. It is not just about technical skills in surgery, but it also involves managerial skills. The researcher tries to breakdown the managerial aspects into seven detailed variables, comprising of accessibility, waiting time, organization of care, healthcare specifically provided by the plastic surgeon, the clinic's staffs service, personal issues of the patient, standard facilities provided at the clinic, and how it all related to post-operative patient consciousness of appearance and the patients' likelihood to recommend the clinic.

By executing this specific research, the researcher hope the shed some light to the plastic surgery service to its ultimate quality. Hopefully, with the highlight of prioritized importance variables, overall aspects of plastic surgery service will be optimized. This certainly will benefit the patients, the plastic surgeons as well as the clinic's management staffs. Eventually, this will also close the gap between the daily practice of plastic surgery service and observed phenomenon we see in the society, whether it be the patients' side or the clinic management side.

1.2. Research Questions

Out of the variables mentioned previously, in order to investigate the phenomenon in the research background, therefore these research questions are formulated :

1. Is the *accessibility of the clinic* giving a positive relation to *post-operative patient consciousness of appearance* and in turn also positively related to the *clinic's recommendation likelihood*?
2. Is the *waiting time at the clinic* giving a positive relation to *post-operative patient consciousness of appearance* and in turn also positively related to the *clinic's recommendation likelihood*?
3. Is the *organization of care at the clinic* giving a positive relation to *post-operative patient consciousness of appearance* and in turn also positively related to the *clinic's recommendation likelihood*?
4. Is the *healthcare provided by the plastic surgeon* giving a positive relation to *post-operative patient consciousness of appearance* and in turn also positively related to the *clinic's recommendation likelihood*?
5. Is the *services provided by the clinic's staffs* giving a positive relation to *post-operative patient consciousness of appearance* and in turn also positively related to the *clinic's recommendation likelihood*?
6. Is the *personal issues of the patient* giving a positive relation to *post-operative patient consciousness of appearance* and in turn also positively related to the *clinic's recommendation likelihood*?
7. Is the *standard of facilities in the clinic* giving a positive relation to *post-operative patient consciousness of appearance* and in turn also positively related to the *clinic's recommendation likelihood*?
8. Is *post-operative patient consciousness of appearance* truly serve as a mediator to the *clinic's recommendation likelihood*?

1.3. Research Objectives

The objectives of this research are as the followings :

1. Discovering the positive relation of *accessibility of the clinic* mediated by *post-operative patient consciousness of appearance* to the *clinic's recommendation likelihood*

2. Discovering the positive relation of *waiting time at the clinic* mediated by *post-operative patient consciousness of appearance* to the *clinic's recommendation likelihood*
3. Discovering the positive relation of *the organization of care at the clinic* mediated by *post-operative patient consciousness of appearance* to the *clinic's recommendation likelihood*
4. Discovering the positive relation of *healthcare provided by the plastic surgeon* mediated by *post-operative patient consciousness of appearance* to the *clinic's recommendation likelihood*
5. Discovering the positive relation of *the services provided by the clinic's staff* mediated by *post-operative patient consciousness of appearance* to the *clinic's recommendation likelihood*
6. Discovering the positive relation of *the personal issue of the patient* mediated by *post-operative patient consciousness of appearance* to the *clinic's recommendation likelihood*
7. Discovering the positive relation of *the standard of facilities in the clinic* mediated by *post-operative patient consciousness of appearance* to the *clinic's recommendation likelihood*
8. Determine whether *post-operative patient consciousness of appearance* truly serve as a mediator to the *clinic's recommendation likelihood*

1.4. Research Benefits

The benefits of this research include :

1. Academic benefits

This research will unveil as a reference for upcoming studies in regards to tendency in clinic's recommendation likelihood related to post-operative patient consciousness of appearance influenced by various factors.

2. Practical benefits

Influencing factors that are conveyed are accessibility, waiting time, organization of care, healthcare provided by the plastic surgeon, services by clinic's staff,

personal issue of the patient, and standard of clinic's facilities. This will determine how those factors can be modified to increase traffic of patients by means of recommendation, increasing the clinic's quality of service as well as outcome, and in the end also increasing the clinic's profit. Overall, these positive modifying efforts will result as a competitive advantage to the clinic compared to other clinics which provide similar service.

1.5. Systematic of Research

This research is constructed in a systematic flow elaborated in five chapters. All of those five chapters are interconnected, making this research as a whole and complete academic script. The elaboration of this thesis research is as the followings:

Chapter 1 : Introduction

This chapter includes research background, explanation of research problems, and the research variables used. Research questions, objectives, benefits, and systematics are also described within this chapter.

Chapter 2 : Literature Review

This chapter includes basic theories as the foundation of the research, explanation in regards to the variables, and also other researches related to this research topic. Hypothesis and conceptual framework are also explained.

Chapter 3 : Research Methods

The third chapter explains the object of research, unit analysis, type of research, operational variables, population, samples, sample formulation, sampling, data collection, and data analysis method.

Chapter 4 : Result and Discussion

This chapter elaborates on the analysis of data processing, which includes the profile and behavior of respondents, descriptive analysis of the variables, inferential analysis using Partial Least Square - Structural Equation Modeling (PLS-SEM) and its discussion.

Chapter 5 : Conclusion

The last chapter elaborates the conclusive result of the research, its implication for managerial perspectives, along with the research limitations and recommendation for further researches.