

The Effect of Semi-permanent Makeup and Makeup on Female Body Image and Social Anxiety

Tien-Li Chen and Chien Mei-Chi

Abstract—The purpose of this study is to understand the objectification theory of semi-permanent makeup, which is used to generate and receive the dependence of MBSRQ-AS, Social Anxiety Scale (SIAS), Time Value with MBSRQ-AS and SIAS. The researcher used questionnaires to invite female college students and members of the public to answer. 234 valid questionnaires were taken. In the research, it can be seen that women with semi-permanent makeup on their faces save time for makeup every morning and improve semi-permanent makeup. Improve the self-confidence of body image (MBSRQ-AS), reduce social anxiety and improve time management. The results of this research provide objective and relevant information for our women when facing semi-permanent makeup, and confirm that semi-permanent makeup is a good first step for women's body, mind, and soul.

Index Terms—Semi-permanent makeup, MBSRQ-AS, SIAS, time value.

I. INTRODUCTION

After the development of technology, life and related medical cosmetology, human beings pay more attention to personal appearance in life, just like Maslow's motivation theory in the hierarchy of needs (upward needs are physiology, safety, love and belonging, respect and self-realization). The third level is social needs, including friendship, trust and acceptance, affection and love. [1], so we began to distinguish ourselves in social situations. At present, Taiwanese women like semi-permanent makeup most. In the Asian Journal of Beauty and Cosmetology (Asian Journal of Beauty and Cosmetology) study, it was described that semi-permanent makeup is satisfied with satisfaction. , Which is statistically significant [2].

Semi-permanent makeup is a kind of beauty and future beauty trend. Due to the current color material technology and the progress of materials, semi-permanent makeup is safer, natural and fashionable, and the environment has been greatly improved, and it can get rid of the traditional red and blue eyebrows. Let female office workers or mothers get up in the morning and save at least 20 minutes of time to draw eyebrows and lips. Without makeup, you can feel confident in your eyes. Today's technology also has electronic tattoos (E-tattoos), which are attached to human skin. Electronic tattoos that are capable of self-repair and multiple stimulation can also be used in electrocardiogram, respiration and

temperature monitoring applications [3]. However, this kind of electronic tattoo that is attached to the skin and can be removed is naturally The degree of realism is lower than that of semi-permanent makeup. The point is that the technical and artistic skills of the tattoo artist will affect the aesthetic effect [4].

As mentioned at the beginning of Maslow's hierarchy of needs, the third level is social needs. Researchers searched for social studies through scopus. The earliest social interaction anxiety scale Mattick and Clarke (1998) was based on the DSM-III-R. The definition of social anxiety is to develop the Social Interaction Anxiety Scale and Social Fear Scale for social interaction, fear of being scrutinized or anxiety, fear of reaction emotions, etc. SPS is mainly used to evaluate daily activities (eating, drinking, writing, etc.). The fear of being censored, while SIAS mainly assesses the fear of general social interaction [5]. These scales change with treatment experiments and remain stable without treatment. They are useful for clinical and research applications. It is said to be an effective and useful scoring scale. If you want to compare appearances on social media, it may increase young adult women's concerns about body image [6]. Studies have shown that individuals of European descent report more Individuals of Asian descent report significantly higher social anxiety [7]. A study on social anxiety among college students in China concluded that through emotional adjustment of self-efficacy and subjective well-being, Chinese college students play an intermediary role in social anxiety and subjective well-being of Chinese college students. The study found that increasing the meaning of life leads to higher effectiveness. Sex [8].

In today's workplace, women's makeup is a courtesy and professional etiquette. If you know how to manage your image, in addition to showing your self-confidence, you can add colors to your workplace. Further research also shows that students with makeup show positive emotions. It is better than other students and proves the importance of the interaction between body self-esteem and cosmetics in cognition. [9]. In addition, research results prove that cosmetics have a more positive effect on body image perception than those without cosmetics [10]. Research also pointed out that makeup is a gender competition, and women who often wear makeup will also spend more money on cosmetics [11]. Many women also use facial makeup to enhance their attractiveness. [12] Internationally, Koreans often use makeup products, except for lip gloss/lipstick/stick, eyeliner and eyebrow pencil, the diversity of products is less than that of Americans and Europeans , Mainly because of the less use of color cosmetics [13], therefore, the attractiveness of the face with light makeup is greater than that of the face without makeup. [12].

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Returning to the application of semi-permanent makeup technology, it is mainly manifested in eyebrow tattoos, eyeliner tattoos, lip tattoos, etc., using modern beauty viewpoints to form brows, eye shapes, and lip shapes that will not fade for one to two years, so as to enhance the local area. The overall beauty of beauty and appearance. Semi-permanent makeup and tattoos are technically similar. The main difference lies in the depth and durability of the skin. Tattoos are regarded as a cultural expression in AMBA. This research has made us realize that young people have a kind of tattoo. A sense of identity with popularity [14], and male tattoos will affect the viewer's perception. In the study, male tattoos are considered attractive self-evaluation [15]. There is also a religious life like the Catholics in Brooklyn, where I think-tattoos are very similar to spiritual practice and dedication, and functionally like sacraments [16]. The most common risks of tattooing are allergies and photoallergic reactions, infections and Koebner phenomenon (character of psoriasis). Before tattooing, the risk of morbidity must be determined to avoid complications [17], in the jrc science for policy report (JRC Science Policy Report) [18], tattoos are considered body art, and data show that 12% of Europeans and 24% of American citizens have tattoos, including teenagers In Europe, 2-9% of young people have tattoos, reaching a peak of 20-30% before the age of 30, and decreasing after the age of 50. According to statistics, more than half of the people who have tattoos have more than one pattern tattoo. According to statistics, in many countries the number of non-professional tattooists exceeds the number of official tattooists. The biggest difference is that they do not follow the sanitary procedures and use cheap ink online [18]. Researchers recommend the use of semi-permanent makeup. Special functionality, it will be excreted with metabolism in about 3-5 years. It is a low-risk and beautiful technology.

As mentioned above, the researcher based on tattoos, makeup and other behaviors, and also in order to explore the relationship between body image and social anxiety, the purpose of this research is as follows:

- 1) Understand the current status of semi-permanent makeup and makeup, body image and social anxiety.
- 2) Explore the impact of semi-permanent makeup and makeup on "MBSRQ-AS", "SIAS" and Time Value
- 3) Explore the impact of Multidimensional Body-Self Relations Questionnaire-Appearance Scales (MBSRQ-AS) on Social Interaction Anxiety Scale (SIAS)

II. METHOD

A. Participants

In this study, female college students and members of the public were invited to answer through questionnaires. In this study, after obtaining the consent of the research subjects, a total of 250 formal questionnaires were invited and sent out. Invalid questionnaires were excluded, and 234 valid questionnaires were obtained, with an effective questionnaire of 93.6%.

According to the purpose of the research, the basic data of

this research are the background variables of the subjects, including tattoo, makeup, age, etc., as explained below:

- 1) Wenxiu (107 positions)
- 2) Makeup (127 bits)
- 3) Age: divided into three categories

Students (18-22 years old, 95 people), youth (23-40 years old, 57 people), young adults (41-70, 82 people)

There are 234 valid questionnaires above.

B. Questionnaire

The questionnaire used in this study is measured by Likert's five scales, which are divided into five levels, namely "strongly disagree", "disagree", "general", "agree", and "strongly agree". Scores 2, 3, 4, and 5. The higher the score, the higher the degree of agreement with the question.

1) Multidimensional body self-relationship questionnaire

Those who exercise regularly (≥ 2 times/week) in the gym have better results in body image than those who exercise less frequently or irregularly. [19].

[Women are more dissatisfied with body image than men, and people who are overweight/obese.],

Multidimensional Body-Self Relation Questionnaire (MBSRQ-AS; Cash, 2000) is used to determine body satisfaction. This study uses Cash (1990) Multidimensional Body-Self Relation Questionnaire (MBSRQ) as a measurement Body image tool. When young women participate in appearance comparisons, they will monitor their bodies more and are afraid that others will evaluate their appearance [20]. This scale is designed to focus on semi-permanent makeup, so I choose Appearance Evaluation (AE) 7 questions and Appearance Orientation (AO) 12 questions, of which questions 6, 7, 13, and 15 are inverse questions

2) Social interaction anxiety scale (SIAS)

The development of SIAS aims to provide reliable and effective tools for assessing social phobia [5]. These scales are based on existing social anxiety and fear lists and items derived from clinical interviews with patients. The analysis shows When the fear of negative evaluation effects is partially eliminated, the reliability and discrimination validity of almost all items are high enough to enable clinicians to confidently explain individual items. There are 19 items in this scale, of which item 8 is related to Question 10 is a reverse question.

3) Time value

The fairest thing about human beings, whether poor or rich, time is the fairest treatment for everyone, so time is as precious as life. Knowing time management will have a positive impact on job satisfaction and relax physical tension [21]. It was also mentioned in a study that time is a limited resource value , To be able to effectively manage [22]. Semi-permanent makeup can save every woman's time, such as saving at least 15 minutes every morning, even if you sweat at work, you don't need to touch up makeup; the cost of semi-permanent makeup is a good value. It can effectively save time every day and complete the set goals as soon as possible. Another study also showed that time management can reduce psychological anxiety [23]. Our work is unlimited,

but time and life are limited. Understanding the value of time is very helpful to us humans. Based on the above arguments, and after testing and correction, four questionnaires were completed, including semi-permanent makeup to save more than 15 minutes of time, sweating and no makeup, cost and CP value, and personal value enhancement.

C. Materials

Different background variables have differences in MBSRQ-AS, SIAS, and Time Value.

Hypothesis One (H1): There is no significant difference between semi-permanent makeup and makeup on the multi-dimensional body "MBSRQ-AS".

Hypothesis Two (H2): There is no significant difference between semi-permanent makeup and makeup for SIAS.

Hypothesis Three (H3): There is no difference in the overall scores of the respondents for "MBSRQ-AS" and "SIAS".

Hypothesis Four (H4): There is no significant difference in Time Value between semi-permanent makeup and makeup.

III. RESULTS

A. Preliminary Analyses

Basic data analysis table (number of samples: 234)

This study mainly conducted a questionnaire survey on Taiwanese students and women in the North District. A total of 250 formal questionnaires were invited and sent out. After excluding invalid questionnaires, 234 valid questionnaires were obtained, with an effective questionnaire of 93.6%.

Research literature points out that Cronbach's α coefficient is more than 7 is acceptable, and Cronbach's α for each aspect is provided below. This study uses SPSS to operate the reliability analysis of each facet, and deletes those whose α is less than 0.3, and in the multi-dimensional appearance attention (AO), deletes the two contents of SIAS-16 and SIAS-18

B. Research Hypothesis Testing

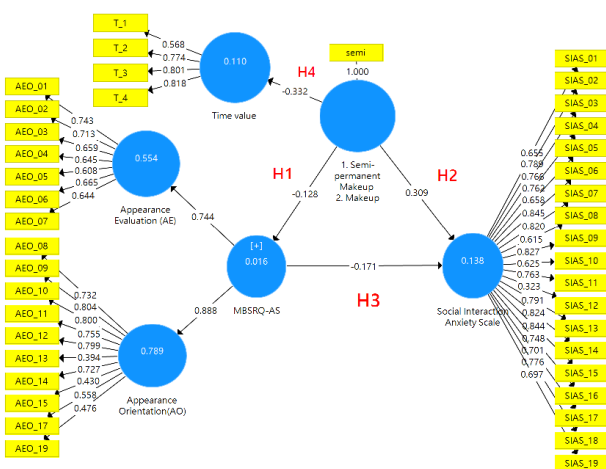


Fig. 1. Path model diagram.

After analyzing Fig. 1. Path model diagram, the conclusion is as follows:

Hypothesis One (H1): There is no significant difference between semi-permanent makeup and makeup for

MBSRQ-AS.

After performing the independent sample t test, the test results are shown in Table I for group statistics and Table II. The independent sample test for each aspect of Table II can be seen from the results of the Levene variance homogeneity test, semi-permanent makeup and multidimensional body of makeup (MBSRQ-AS) There is no significant difference in the variance of the content. From the t-test table, the t value is 2.119 and the significance is 0.035 (<0.05). Therefore, the null hypothesis is rejected, which means that the semi-permanent makeup and the multi-dimensional body of makeup (MBSRQ-AS The average content of) is significantly different. After the post-test, it can be found that the average content of multi-dimensional body (MBSRQ-AS) for semi-permanent makeup is greater than the average content of multi-dimensional body (MBSRQ-AS) for makeup.

Hypothesis Two (H2): There is no significant difference between semi-permanent makeup and makeup for SIAS.

After performing the independent sample t test, the test results are shown in Table I for the group statistics and the independent sample test for each aspect of Table II. From the results of the Levene Variance Homogeneity Test, it can be seen that the variance of the SIAS content of semi-permanent makeup and makeup is no If there is a significant difference, from the t test table, the t value is -5.140 and the significance is 0 (<0.05). Therefore, the null hypothesis is rejected, which means that the average value of the SIAS content of semi-permanent makeup and makeup is significantly different. In addition, after post-testing, it can be found that the average SIAS content of semi-permanent makeup is less than the average SIAS content of makeup.

Hypothesis Three (H3): There is no difference in the overall scores of the respondents for "MBSRQ-AS" and "SIAS".

Table III is a paired sample t test table. The test result shows that the t value is 10.224, the degree of freedom is 233, and the significance is 0.000 (less than 0.05, so H3 is rejected). The overall score of "SIAS" has a significant difference, and it can be seen from the column of (95% confidence interval of the difference number) that since the upper and lower limits are both positive, it can be inferred that the interviewee's attitude towards "MBSRQ- The recognition score of "AS" is higher than that of the interviewed [SIAS].

Hypothesis Four (H4): There is no difference in the overall score of the "Time Value" among the respondents.

After performing the independent sample t test, the test results are shown in Table I for the group statistics and the independent sample test for each aspect of Table II. From the results of the Levene Variance Homogeneity Test, it can be seen that the variance of the SIAS content of semi-permanent makeup and makeup is no If there is a significant difference, from the t test table, the t value is 5.302 and the significance is 0 (<0.05), so the null hypothesis is rejected, which means that the average value of the time value content of semi-permanent makeup and makeup is significantly different. In addition, after post-checking, it can be found that the average Time Value content of semi-permanent makeup is greater than the average Time Value content of makeup.

TABLE I: GROUP STATISTICS

Item	Semi	N	Mean	Std. Deviation	Std. Error Mean
MBSRQ-AS	Semi-permanent	107	3.5426	0.43522	0.04207
	make up	127	3.4182	0.45722	0.04057
SIAS	Semi-permanent	107	2.6188	0.64739	0.06259
	make up	127	3.0705	0.68781	0.06103
Time_value	Semi-permanent	107	4.0047	0.56529	0.05465
	make up	127	3.5965	0.60426	0.05362

TABLE II: INDEPENDENT SAMPLE VERIFICATION FOR EACH ASPECT

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
MBSRQ-AS	Equal variances assumed	0.032	0.857	2.119	232	0.035	0.12436	0.05870	0.00871	0.24000
	Equal variances not assumed			2.128	228.542	0.034	0.12436	0.05845	0.00919	0.23953
SIAS	Equal variances assumed	0.001	0.981	-5.140	232	0.000	-0.45166	0.08787	-0.62479	-0.27853
	Equal variances not assumed			-5.167	229.139	0.000	-0.45166	0.08742	-0.62391	-0.27942
Time Value	Equal variances assumed	0.550	0.459	5.302	232	0.000	0.40822	0.07700	0.25651	0.55992
	Equal variances not assumed			5.332	229.441	0.000	0.40822	0.07656	0.25736	0.55907

TABLE III: MBSRQ-AS - SIAS PAIRED SAMPLES TEST

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	MBSRQ-AS - SIAS	0.61119	0.91444	0.05978	0.49341	0.72897	10.224	233	0.000

IV. DISCUSSION

The main goal of this research is to investigate the conditions under which semi-permanent makeup and makeup may be associated with body image "MBSRQ-AS" and social anxiety "SIAS".

TABLE IV: T VALUE AND P VALUE OF SEMI-PERMANENT MAKEUP AND MAKEUP

Group	T	p	Remark size
MBSRQ-AS	2.119	.035*	Semi-permanent makeup >make up
SIAS	-5.140	.000***	Semi-permanent makeup <make up
Time Value	5.302	.000***	Semi-permanent makeup >make up

Note : * $P \leq 0.05$ ** $P \leq 0.01$ *** $P \leq 0.001$

Table IV is to better express the T value and p value of each group of semi-permanent makeup and makeup. It can be clearly understood that the special feature is that "MBSRQ-AS" presents semi-permanent makeup >make-up, meaning that there is semi-permanent makeup on the face. Women who put on makeup increase their satisfaction with body image. The Social Anxiety Scale "SIAS" showed semi-permanent makeup <make-up, meaning that women with semi-permanent makeup on their faces reduced social anxiety. Table III MBSRQ-AS-SIAS Paired Samples Test indicates that the recognition score of "MBSRQ-AS" is higher than the recognition score of the interviewed "SIAS". "Time Value" shows semi-permanent makeup >make-up,

meaning that women with semi-permanent makeup on their faces increase their satisfaction with Time Value.

V. CONCLUSION

This research focuses on women with semi-permanent makeup. In addition to fashion trends and the omission of makeup every morning, the psychological and facial appearance have been positively improved. It can be learned from the questionnaire of the respondents that women with semi-permanent makeup are in the body image questionnaire. (MBSRQ-AS) The self-confidence level is higher than that of general makeup women, and the negative scores on social interaction anxiety are also lower than those of general makeup women. The semi-permanent makeup scores on the Time Value questionnaire are higher than those of general makeup women. Therefore, it can be confirmed that the body image, social interaction anxiety and Time Value of women with semi-permanent makeup are important factors that affect women. In the process of influencing, the positive score generated by the body image can affect the social interaction anxiety, that is, semi-permanent. Makeup is a very good choice for women.

CONFLICT OF INTEREST

The authors declare no conflict of interest

AUTHOR CONTRIBUTIONS

Mei-Chi Chien, conducted the research. Tien-Li Chen,

analyzed the data. Mei-Chi Chien, wrote the paper. All authors had approved the final version.

REFERENCES

- [1] S. McLeod, "Maslow's hierarchy of needs," *Simply Psychology*, 2007, vol. 1, pp. 1-8.
- [2] S.-N. Hong, "Effects of preference for semi-permanent makeup on procedure satisfaction," *Asian Journal of Beauty and Cosmetology*, 2018, vol. 16, no. 2, pp. 165-177.
- [3] Q., Wang *et al.*, "Self-healable multifunctional electronic tattoos based on silk and grapheme," *Advanced Functional Materials*, 2019, vol. 29, no. 16, p. 1808695.
- [4] C. Cuyper, "How to advise a patient who wants a tattoo?" *La Presse Médicale*, 2020, vol. 49, no. 4, p. 104048.
- [5] R. P. Mattick and J. C. Clarke, "Development and validation of measures of social phobia scrutiny fear and social interaction anxiety" Editor's note: This article was written before the development of some contemporary measures of social phobia, such as the Social Phobia and Anxiety Inventory (Turner *et al.*, 1989). We have invited this article for publication because of the growing interest in the scales described therein," *S.T. Behaviour Research and Therapy*, 1998, vol. 36, no. 4, pp. 455-470.
- [6] J. V. Hogue and J. S. Mills, "The effects of active social media engagement with peers on body image in young women," *Body Image*, 2019, vol. 28, pp. 1-5.
- [7] Q. J. J. Wong *et al.*, "Measurement equivalence of the Social Interaction Anxiety Scale (SIAS) and Social Phobia Scale (SPS) across individuals with social anxiety disorder from Japanese and Australian sociocultural contexts," *Journal of Affective Disorders*, 2019, vol. 243, pp. 165-174.
- [8] B. Ye *et al.*, "Social anxiety and subjective well-being among Chinese college students: A moderated mediation model," *Personality and Individual Differences*, 2021, vol. 175, p. 110680.
- [9] R. Palumbo *et al.*, "Does make-up make you feel smarter? The "lipstick effect" extended to academic achievement," *Cogent Psychology*, 2017, vol. 4, no. 1.
- [10] T. F. Cash *et al.*, "Effects of cosmetics use on the physical attractiveness and body image of American college women," *The Journal of social psychology*, 1989, vol. 129, no. 3, pp. 349-355.
- [11] A. L. Mafra *et al.*, "Makeup usage in women as a tactic to attract mates and compete with rivals," *Personality and Individual Differences*, 2020, vol. 163, p. 110042.
- [12] K. Tagai, H. Ohtaka, and H. Nittono, "Faces with light makeup are better recognized than faces with heavy makeup," *Frontiers in Psychology*, 2016, vol. 7, p. 226.
- [13] K. Jung *et al.*, "Realistic and aggregated exposure assessment of Korean men and women to color make-up products," *Food and Chemical Toxicology*, 2018, vol. 118, pp. 382-389.
- [14] L. Aldaz *et al.*, "Percepciones del tatuaje como expresión cultural en AMBA. Interdisciplinaria," *Revista de Psicología y Ciencias Afines*, 2020, vol. 38, no. 1, pp. 235-243-243.
- [15] K. Molloy and D. Wagstaff, "Effects of gender, self-rated attractiveness, and mate value on perceptions tattoos," *Personality and Individual Differences*, 2021, vol. 168, p. 110382.
- [16] K. Molloy and D. Wagstaff, "Effects of gender, self-rated attractiveness, and mate value on perceptions tattoos," *Personality and Individual Differences*, 2021, p. 168.
- [17] G. Gualdi *et al.*, "Tattoo: Ancient art and current problems," *Journal of Cosmetic Dermatology*, 2021, vol. 20, no. 2, pp. 602-604.
- [18] P. Piccinini *et al.*, "Safety of tattoos and permanent make-up," Final report. EUR27947, 2016.
- [19] L. A. H. Haakstad *et al.*, "Mirror, mirror - Does the fitness club industry have a body image problem?" *Psychology of Sport and Exercise*, 2021, vol. 53, p. 101880.
- [20] V. Seekis, G. L. Bradley, and A. L. Duffy, "Appearance-related social networking sites and body image in young women: Testing an objectification-social comparison model," *Psychology of Women Quarterly*, 2020, vol. 44, no. 3, pp. 377-392.
- [21] B. J. C. Claessens *et al.*, "A review of the time management literature," *Personnel Review*, 2007, vol. 36, no. 2, pp. 255-276.
- [22] B. K. Britton and A. Tesser, "Effects of time-management practices on college grades," *Journal of Educational Psychology*, 1991, vol. 83, no. 3, p. 405.
- [23] D. Lang, "Preventing short-term strain through time-management coping," *Work and Stress*, 1992, vol. 6, no. 2, pp. 169-173.

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