

A Study of Romantic Relationships for Jewelry Design: The Case of Thai Women

Nattapong Kongprasert, Kageeporn Wongpreedee, Pornarm Virutamasen, and Thiantip Chuanprapun

Abstract—Valentine's Day: Happy couples want to make it special and unforgettable. Gift is represented where can be touchy depending on what type of relationship. It can be easy to overthink the whole thing. Men all over the world would like to buy gifts for his partner. Giving a special piece of jewelry can be exciting. Therefore, it is difficult for them to buy jewelry where are suited for every stage of a relationship, her interests and personality. Then, it is important to work closely with women to make sure that the products will fulfill their needs and requirements. This study presented a study of romantic relationships of Thai women for jewelry design. The triangular theory of love and emotional design were integrated to explore the relationship between kind of love and love symbols of Thai women. It was based on a questionnaire. It performed in three phases. First, it was to explore the relationship between kind of love and love symbols of Thai women. Second, it was to design new jewelry. The result from the first phase was interpreted and used in this phase to design new jewelry. The love symbols are related to the romantic relationship were used to design a new product. Third, it was to explore the customer's perception to new jewelry. New jewelry was used to interview the target customer to explore the customer's perception to jewelry. Results can be used to guide designers designing jewelry following the romantic relationship of Thai women and love symbols.

Index Terms—Triangular theory of love, love symbol, emotional design, jewelry design.

I. INTRODUCTION

Valentine's Day: the most romantic, lovey-dovey, glorious day of affection, gifts, and expressions of love of the year. Happy couples want to make it special and unforgettable, but sometime they don't know what to do to make their beloved remember this day forever. Men all over the world would like to surprise his partner and make this day beautiful and special. Valentine's Day gift is represented where can be touchy depending on what type of relationship and it can be easy to overthink the whole thing. It is difficult for men to buy gifts where are suited for every stage of a relationship. Whether they are married to her, looking to propose to her, or still

getting to know her.

The most popular Valentine's Day gifts are candy (chocolates), flowers, cards, jewelry, dining/eating out, clothing, gift cards and others. Jewelry is still a popular with women because most women will appreciate a piece of jewelry. Giving a special piece of jewelry can be exciting. For women, most jewelry would not turn down diamonds, but they are usually worn on special occasions only and a lot of women would rather get something that they can wear often. Buying jewelry for woman is extremely difficult to find a suitable jewelry. Trying to find the right jewelry for a woman may require some creativity and deep reflection on her interests, personality and interpersonal relationship.

To impress women with jewelry, it is important to work closely with women to make sure that the products will fulfill their needs and requirements. Then, this study presents a study of romantic relationships of Thai women for jewelry design. It is based on a questionnaire. It performs in four phases. First, it was to explore the relationship between kind of love and love symbols. Second, it was to design new jewelry. The result from the first phase was interpreted and used in this phase to design new Jewelry. Third, it was to explore the customer's perception to new jewelry.

II. LITERATURE REVIEW

A. Triangular Theory of Love

The triangular theory of love [1] holds that love can be understood in terms of three components that together can be viewed as forming the vertices of a triangle (Fig. 1). These three components are intimacy (the top vertex of the triangle), passion (the left-hand vertex of the triangle), and commitment (the right-hand vertex of the triangle).

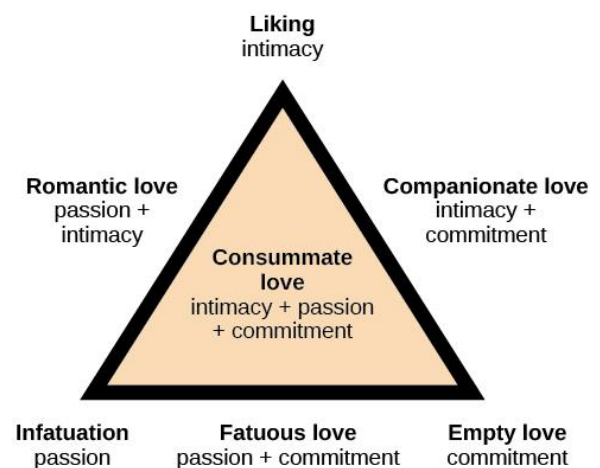


Fig. 1. Triangle of love [1].

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The three components of love in the triangular theory are intimacy, passion, and commitment. Each component manifests a different kind of love.

Intimacy, it refers to feelings of closeness, connectedness, and bondedness in loving relationships. It thus includes within its purview those feelings that give rise, essentially, to the experience of warmth in a loving relationship.

Passion, it refers to the drives that lead to romance, physical attraction, sexual consummation, and related phenomena in loving relationships. The passion component includes within its purview those sources of motivational and other forms of arousal that lead to the experience of passion in a loving relationship.

Commitment, it refers, in the short-term, to the decision that one loves a certain other, and in the long-term, to one's commitment to maintain that love. These two aspects of the decision/commitment component do not necessarily go together, in that one can decide to love someone without being committed to the love in the long-term, or one can be committed to a relationship without acknowledging that one loves the other person in the relationship.

The amount of love one experiences depends on the absolute strength of these three components, and the kind of love one experiences depends on their strengths relative to each other. The three components interact with each other and with the actions that they produce and that produce them so as to form a number of different kinds of loving experiences.

The three components of love generate eight possible limiting cases when considered in combination. Each of these cases gives rise to a different kind of love [2].

1. *Nonlove* refers simply to the absence of all three components of love.

2. *Liking* in this case is not used in a trivial sense. Sternberg says that this intimate liking characterizes true friendships, in which a person feels a bondedness, a warmth, and a closeness with another but not intense passion or long-term commitment.

3. *Infatuated love* is often what is felt as "love at first sight." But without the intimacy and the commitment components of love, infatuated love may disappear suddenly.

4. *Empty love*: Sometimes, a stronger love deteriorates into empty love, in which the commitment remains, but the intimacy and passion have died. In cultures in which arranged marriages are common, relationships often begin as empty love.

5. *Romantic love*: Romantic lovers are bonded emotionally (as in liking) and physically through passionate arousal.

6. *Companionate love* is often found in marriages in which the passion has gone out of the relationship, but a deep affection and commitment remain. Companionate love is generally a personal relation you build with somebody you share your life with, but with no sexual or physical desire. It is stronger than friendship because of the extra element of commitment.

7. *Fatuous love* can be exemplified by a whirlwind courtship and marriage in which a commitment is motivated largely by passion, without the stabilizing influence of intimacy.

8. *Consummate love* is the complete form of love, representing the ideal relationship toward which many people

strive but which apparently few achieve.

Sternberg's Triangular Love Scale (TLS) is reported as a 45-item Likert-type questionnaire designed to evaluate components of romantic relationships. The scale was developed based on Sternberg's triangular theory of love [1]. According to this orientation, romantic love consists of three primary components labeled intimacy, passion and commitment. TLS has 45 items, of which 15 measure Intimacy, 15 Passion and 15 Decision/commitment. Each of these items is evaluated with a Likert type scale, where one point represents "not at all", 5 "moderately" and 9 "extremely". There are no labels for the points in between those indicated [3].

The triangular love scale still has the peculiarity of having a blank space in all 45 statements. This space should be filled with the name of the same loved one for all the items. Scores are averaged between the three identified dimensions. The scale has been used as a self-report measure and also an indicator of perception the respondent holds of a partner or of an idealized partner. Sternberg's original sample included couples involved in relationships that averaged greater than 4 years, but others have extended use of the scale to include shorter-term dating relationships.

Many studies have followed the triangular love scale to evaluate components of romantic relationships. Tung [4] studied the associations between love variables and relationship satisfaction among local romantic partners. Heinrich *et al.* [5] studied the structure of interpersonal love and consumers' love to brands. Overbeek *et al.* [6] studied adolescents' perceptions of the main (dis)advantages of being involved in romantic relationships showed a specific pattern of associations with intimacy, passion, and commitment. Ahmetoglu *et al.* [7] studied the associations among participant demographics, personality factors, love dimensions, and relationship length.

B. Emotional Design

Emotion is crucial for everyday decision making [8]. It is the complex psychophysiological experience of an individual's state of mind as interacting with biochemical and environmental influences. Emotion fundamentally involves physiological arousal, expressive behaviours, and conscious experience [9]. Emotion is associated with mood, temperament, personality and disposition, and motivation. Customer's satisfaction is an affective behaviour from the customer. It relies on desires more than needs which desires are mainly depending on aesthetic, semantic and symbolic aspects of a cognitive response to a design [10], [11]. This means that the customer purchases a product based on more subjective terms such as manufacturer image, brand image, reputation, design, impression, etc., although the products seem to be equal.

The emotional design is relationship between the emotional responses and design appearance that focused on the user's need and experience. It is not only communicated through the style of design, function, form and usability, but also built up experience for the user on their needs and demands. There are three levels of information processing according to the situation and response: visceral, behavioural, and reflective.

Visceral design concerns itself with appearances. Behavioural design has to do with the pleasure and effectiveness of use. Reflective design considers the rationalization and intellectualization of a product. They are integrated through any design [8]. Thus, emotional design is product design targeted to satisfy customer's needs or requirements. By controlling certain design factors, customer's emotion can be evaluated, designed, and satisfied [12].

Emotional design is a common research field involving both designers and human factors. It focuses on the evaluation and decision-making phase in the design process. It is a technique to identify correspondences and gaps between customer's perception and designer's intention (Fig. 2). The correspondence is used to guide designers for designing the new product. The gap is removed or modified to be relevant to customer's perception [13]. The advantage of the emotional design is that the product designed responds to the needs or requirements of customers.

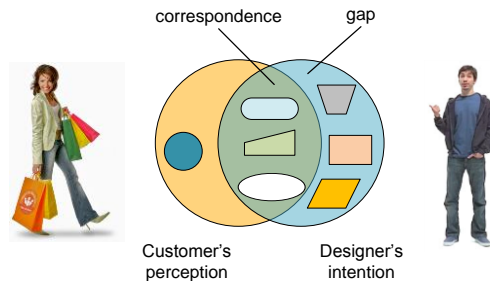


Fig. 2. Emotional design principle [13].

Practically, the emotional design is performed with a questionnaire with the new product or concept being evaluated by the customers. It works with the semantic differential, Likert scale and principal component analysis to explore the customer's needs or requirements in the information phase. In Europe, initially, the researchers had only to do a semantic analysis [14]-[16]. Today, they tend to integrate explicitly the emotional analysis with the semantic one [13], [17]-[20].

III. METHODOLOGY

This study focused on the analysis of romantic relationships of Thai women for jewelry design. It performed in three phases. First, it was to explore the relationship between kind of love and love symbols. Second, it was to design new jewelry. Third, it was to explore the customer's perception to new jewelry. This approach followed the following steps (Fig. 3).

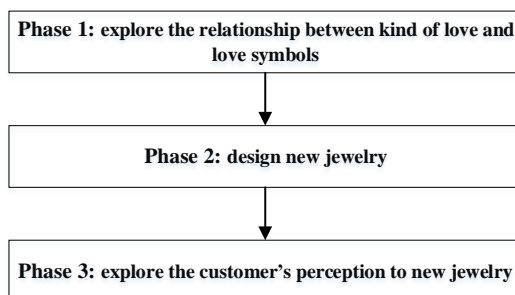


Fig. 3. Methodology.

Phase 1: explore the relationship between kind of love and love symbols

This phase was to explore the relationship between kind of love and love symbols of Thai women. This approach followed the following steps.

1. *Definition of the questionnaire:* The questionnaire is to provide designers with a fine understanding of Thai women. It was created to help the designer interview Thai women. It is composed of 3 parts.

First, it was to explore the general information of Thai women. It is composed of gender, age and status (Fig. 4).

Part 1: General Information

1. Gender
☐ Male ☐ Female
2. Age
☐ under 20 ☐ 20-29 ☐ 30-39 ☐ 40-49 ☐ more than 50
3. Status
☐ Single ☐ In a relationship ☐ Engaged
☐ Married ☐ Divorced ☐ Widowed

Fig. 4. General information.

Second, it was to explore the kind of love of Thai women. Sternberg's Triangular Love Scale (TLS) [2] (see Fig. 5) was used to explore the relationship between status and kind of love of Thai women.

Part 2: The kind of love

- not at all true/ 1 2 3 4 5 6 7 8 9 definitely true
disagree completely agree completely

A. Intimacy

1. I am actively supportive of ____'s well-being.
2. I have a warm relationship with ____.
3. I am able to count on ____ in times of need.
4. ____ is able to count on me in times of need.
5. I am willing to share myself and my possessions with ____.
6. I receive considerable emotional support from ____.
7. I give considerable emotional support to ____.
8. I communicate well with ____.
9. I value ____ greatly in my life.
10. I feel close to ____.
11. I have a comfortable relationship with ____.
12. I feel that I really understand ____.
13. I feel that ____ really understands me.
14. I feel that I can really trust ____.
15. I share deeply personal information about myself with ____.

B. Passion

16. Just seeing ____ excites me.
17. I find myself thinking about ____ frequently during the day.
18. My relationship with ____ is very romantic.
19. I find ____ to be very personally attractive.
20. I idealize ____.
21. I cannot imagine another person making me as happy as ____ does.
22. I would rather be with ____ than with anyone else.
23. There is nothing more important to me than my relationship with ____.
24. I especially like physical contact with ____.
25. There is something almost "magical" about my relationship with ____.
26. I adore ____.
27. I cannot imagine life without ____.
28. My relationship with ____ is passionate.
29. When I see romantic movies or read romantic books I think of ____.
30. I fantasize about ____.

C. Commitment

31. I know that I care about ____.
32. I am committed to maintaining my relationship with ____.
33. Because of my commitment to ____, I would not let other people come between us.
34. I have confidence in the stability of my relationship with ____.
35. I could not let anything get in the way of my commitment to ____.
36. I expect my love for ____ to last for the rest of my life.
37. I will always have a strong responsibility for ____.
38. I view my commitment to ____ as a solid one.
39. I cannot imagine ending my relationship with ____.
40. I am certain of my love for ____.
41. I view my relationship with ____ as permanent.
42. I view my relationship with ____ as a good decision.
43. I feel a sense of responsibility toward ____.
44. I plan to continue in my relationship with ____.
45. Even when ____ is hard to deal with, I remain committed to our relationship.

Fig. 5. Triangular love scale [2].

The first 15 items in the scale reflect intimacy, the second 15 measure passion, and the final 15 reflect commitment. Compare Thai women scores closest to Thai women three totals in the appropriate column below to determine the degree to which Thai women experience each of these three components of love (Fig. 6). This study focused on value that is “somewhat above average” or upper.

Intimacy (Items 1-15)	Passion (Items 16-30)	Commitment (Items 31-45)	
93	73	85	Significantly below average
102	85	96	Somewhat below average
111	98	108	Average
120	110	120	Somewhat above average
129	123	131	Significantly above average

Fig. 6. Scoring [2].

Third, it was to explore the relationship between kind of love and love symbols. The love symbols were related with love were used to interview Thai women. Nine love symbols were collected from magazines and websites by expert jewelry designer. They were heart, cupid, infinity, kiss, diamond, lily, rose, love knot and lace (Fig. 7). The target customers will select three symbols that were related with their love and give the score. The scale used for evaluation was a three degree scale.

- 3 – extremely
- 2 – very
- 1 – moderately

Part 3: Love Symbols










								
Heart	Infinity	Cupid	Rose	Lily	Diamond	Kiss	Love Knot	Lace
Score								

Fig. 7. Love symbols.

Age	Status	Qty.	Kind of Love						
			Liking	Infatuation	Empty	Romantic	Fatuous	Companionate	Consummate
20-29	In a relationship	172	8	16	20	16	12	16	84
	Married	36	8		8			8	12
30-39	In a relationship	68		4	8		12	4	40
	Married	124			8	4		48	64

Fig. 8. The relationship between status and kind of love.










Kind of Love									
	Heart	Infinity	Cupid	Rose	Lily	Diamond	Kiss	Love Knot	Lace
Liking	16	16	16	20	12	4	8	0	4
Infatuation	24	0	0	32	28	4	28	4	0
Empty	64	80	4	12	4	28	4	68	0
Romantic	0	0	24	32	0	0	52	0	12
Fatuous	48	40	8	20	12	8	8	0	0
Companionate	36	164	4	8	32	128	0	84	0
Consummate	216	396	76	84	64	208	68	88	0
Overall	404	696	132	208	152	380	168	244	16

Fig. 9. The relationship between kind of love and love symbols.

2. *Interview target customers:* This study focused on Thai women that are married or in a relationship status. They live in Bangkok metropolitan region. They are between 20-39 years old. Four hundred ($n = 400$) Thai women were interviewed.

3. *Results:* This study summarized the relationship between status and kind of love of Thai women in 2 groups. First, Thai women were between 20-29 years old. Mean within-group age was 24.5 years ($SD = 4.1$). Second, they were between 30-39 years old. Mean within-group age was 35.2 years ($SD = 3.5$).

Fig. 8 illustrated the relationship between status and kind of love of Thai women. Two hundred Thai women were consummate love. It is the most love of both groups. Fig. 9 illustrated the relationship between kind of love and love symbols.

Liking, the symbols are related liking love are heart, infinity cupid and rose.

Infatuation, the symbols are related infatuation love are heart, rose, lily and kiss.

Empty, the symbols are related empty love are heart, infinity and love knot.

Romantic, the symbols are related romantic love are cupid, rose and kiss.

Fatuous, the symbols are related fatuous love are heart, infinity and rose.

Companionate, the symbols are related companionate love are infinity, diamond and love knot.

Consummate, the symbols are related consummate love are heart, infinity and diamond.

These results can be used to guide designers designing jewelry following the romantic relationship and love symbols.

Phase 2: design new jewelry

This phase was to design new jewelry. The result from the first phase was interpreted and used in this phase to design new jewelry. The love symbols were related the consummate love were used to design new jewelry. They were heart, infinity and diamond. Six pendants were designed and related the consummate love as shown in Fig. 10.



Fig. 10. New jewelry.

Phase 3: explore the customer's perception to new jewelry

This phase was to explore the customer's perception to new jewelry. Six pendants from previous phase were used to interview Thai women. This phase focused on Thai women who are consummate love. This approach followed the following steps.

1. *Definition of the questionnaire:* The questionnaire is to provide designers with a fine understanding of Thai women. It was created to help the designer interview Thai women. It is composed of 3 parts.

First, it was to explore the general information of Thai women. It was composed of gender, age and status. It is the same as phase 1.

Second, it was to explore the kind of love of Thai women. Sternberg's Triangular Love Scale (TLS) [2] was used to explore the relationship between status and kind of love of Thai women. It is the same as phase 1.

Third, it was to explore the customer's perception to new jewelry. Six pendants were used to interview Thai women to identify correspondences and gaps between Thai women and designer's intention. The scale used for evaluation was a five degree scale (5, 4, 3, 2, 1). The example of questionnaire shown in Fig. 11.

- 5 - Completely true of me
- 4 - Very true of me
- 3 - Moderately true of me
- 2 - Slightly true of me
- 1 - Not at all true of me

Design 1

	1	2	3	4	5	
Not at all true of me						Completely true of me

Fig. 11. The example of questionnaire.

2. *Interview target customers:* This study focused on Thai women that are married or in a relationship status. They live in Bangkok metropolitan region. They were between 20-39 years old. One hundred ten ($n = 110$) Thai women were interviewed.

3. *Results:* This study summarized the relationship between status and kind of love of Thai women in 2 groups. First, Thai women were between 20-29 years old. Mean within-group age was 26.1 years ($SD = 3.4$). Second, they were between 30-39 years old. Mean within-group age was 34.5 years ($SD = 3.8$).

Fig. 12 illustrated the relationship between status and kind of love of Thai women. Sixty Thai women were consummate love. It is the most love of both groups. Fig. 13 illustrated Thai women perception to new jewelry. It shown the average value of each jewelry. Design #6 is highly related to consummate love of Thai women. Design #1 and #4 are moderately related

to consummate love of Thai women.

Age	Status	Qty.	Kind of Love						
			Liking	Infatuation	Empty	Romantic	Fatuous	Companionate	Consummate
20-29	In a relationship	40	2	6	4	2	6	0	20
	Married	22	0	0	4	0	0	2	16
30-39	In a relationship	36	0	4	6	2	4	2	18
	Married	12	0	0	4	0	0	2	6

Fig. 12. The relationship between status and kind of love.







						
	Design 1	Design 2	Design 3	Design 4	Design 5	Design 6
Average Value	3.04	3.64	3.15	3.00	3.60	4.02
SD	0.98	0.78	1.02	1.05	0.82	0.65

Fig. 13. The average value of each jewelry.

IV. CONCLUSION

This study presented a study of romantic relationships of Thai women for jewelry design. It was based on a questionnaire. It performed in three phases. First, it was to explore the relationship between kind of love and love symbols of Thai women. Four hundred Thai women were interviewed to explore the romantic relationship. Two hundred Thai women are consummate love. It is the most love of Thai women. The symbols were related consummate love are heart, infinity and diamond. Second, it was to design new jewelry. Six pendants were designed and related the consummate love. Third, it was to explore the customer's perception to new jewelry. Six pendants were used to interview Thai women to identify correspondences and gaps between Thai women and designer's intention. One hundred ten Thai women were interviewed to explore the customer's perception to new jewelry. Fifty five Thai women were consummate love. Results illustrated that design #6 is highly related to consummate love of Thai women. Results can be used to guide designers designing jewelry following the romantic relationship of Thai women and love symbols.

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