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Is it only the thought that counts; or do gift cost, social approval, and relationship satisfaction matter too?

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2020

I hereby declare that this Master's thesis is my original work

and it has been written by me in its entirety.

I have duly acknowledged all the sources of information

which have been used in this thesis.

This Master's thesis has also not been submitted for any degree

in any university previously.

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8 May 2020

Abstract

This study investigated the effects of gift cost, social network (SN) approval, and relationship satisfaction on a gift receiver's perception of the giver's commitment to their romantic relationship. In addition to predictions of positive main effects (H_1 to H_3), it was predicted that relationship satisfaction would moderate the effects of gift cost (H_4) and SN approval (H_5). Participants were 227 undergraduates from Singapore who completed a survey online. A hierarchical moderated regression analysis was conducted, and the results supported all the hypotheses except H_5. The novel findings were that receivers perceived their partners to be more committed when their SN members approved of the gift; and gift receivers who were less satisfied with their relationships were more influenced by gift cost.

Keywords: *romantic gift giving, gift cost, social network approval, relationship satisfaction, commitment*

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Is It Only the Thought that Counts;

or Do Gift Cost, Social Approval, and Relationship Satisfaction Matter Too?

Imagine receiving a gift from your romantic partner. He/she had so much time to spare lately, and you know he/she is quite stable financially. However, the gift seems like something which did not require much time, effort, nor money to prepare. Will this make you doubt his/her commitment to your relationship? You show this gift to your family members and friends, and they do not think it is a good gift. Will this make you doubtful as well, or do these aspects not bother you at all because you are already satisfied with your relationship as it is?

This study aimed to answer these questions by examining the influence that gift cost, social network (SN) approval, and relationship satisfaction have on a gift receiver's perception of the gift giver's relationship commitment (hereinafter referred to as *perceived partner commitment*). Past research has found that gifts between romantic partners serve the important function of signaling relationship commitment from the giver to the receiver (Belk & Coon, 1993). More specifically, a more costly gift signals greater commitment than a less costly gift (Yamaguchi, Smith & Ohtsubo, 2015). Commitment here refers to elements of "promise, dedication, and attachment" from one partner to another (Belk & Coon, 1993, p. 404). While most studies on romantic gift giving have focused on the giver and the receiver exclusively, little if anything is known about how social influence can affect the perceptions and outcomes involved in romantic gift giving. This is surprising given that numerous studies have shown the approval from one's social network heavily influences the perceptions and outcomes of romantic relationships (Etcheverry, Le & Hoffman, 2013). Hence, the objective of this study was to fill this gap in the literature by empirically testing the effect of SN approval of a gift on a receiver's perceived partner commitment. In addition, this study also investigated how individuals could be

differentially sensitive to gift cost and SN approval depending on how satisfied they are with their relationships. An experimental study was conducted to empirically test these predictions.

Gift Cost and Perceived Partner Commitment

Research on romantic gift giving consistently found that gifts function as signals of the giver's willingness to invest in and commit to the relationship with the receiver (Camerer, 1988; Jonason, Cetrulo, Madrid & Morrison, 2009). More recent research has found that one of the underlying mechanisms of this signaling effect is gift cost in that more costly gifts are perceived as signs of greater relationship commitment as compared to less costly gifts (Belk & Coon, 1993; Yamaguchi et al., 2015). This can be explained by the Costly Signaling Theory (CST; Grafen, 1990; Zahavi & Zahavi, 1999) which defines a *signal* as a conveyor of information about the signaler's underlying qualities which are important to the observer yet difficult to observe. A signal is considered *costly* when its display requires the signaler to incur a cost which is indicative of that particular quality (Zahavi, 1975). Thus, a gift serves as a costly signal of relationship commitment because preparing the gift incurs financial cost (monetary) as well as psychic cost (time and effort), which could otherwise have been channeled to other people or other activities, but the giver chose to commit them to the receiver; this sacrifice of money, time and effort is indicative of relationship commitment (Yamaguchi et al., 2015).

In support of this, Laidre and Johnstone (2013) mentioned that gifts are reliable signals of commitment because they incur significant costs which only "honestly committed" (p. 162) persons would find worthy of incurring (as cited in Komiya, Ohtsubo, Nakanishi & Oishi, 2018). This helps receivers solve the *commitment problem* which refers to the uncertainty people experience with regards to how loyal their partners are to them; more costly gifts reduce the

receiver's uncertainty about the giver's commitment, whereas less costly gifts increase this uncertainty (Yamaguchi et al., 2015).

In this study, I would expect the results to be similar to that of past studies in that more costly gifts should result in higher perceived partner commitment, whereas less costly gifts should result in lower perceived partner commitment.

Social Network Approval of Gift and Perceived Partner Commitment

Romantic relationships exist within larger social networks which consist of family, friends and acquaintances who have been found to influence relationship perceptions as well as relationship outcomes (Berger, 1979; Etcheverry, Le & Charania, 2008). The extent to which a couple's social network members approve or disapprove of the romantic relationship has been referred to as *social network (SN) approval,* and this is one of the most commonly studied variables in the social network literature (Etcheverry et al., 2013; Sprecher, Felmlee, Orbuch & Willetts, 2002). SN approval has been found to predict numerous relationship perceptions and outcomes such as commitment (Etcheverry et al., 2008), satisfaction (Sprecher & Felmlee, 1992), as well as stability and quality of the relationship (Le, Dove, Agnew, Korn & Mutso, 2010). Berger (1979) suggested that the uncertainty theory provides a possible explanation for this effect in that SN approval reduces possible uncertainty experienced by the couple and this leads to positive changes in the way they perceive each other as well as the way they behave towards each other (as cited in Etcheverry et al., 2008). On the other hand, SN disapproval increases the uncertainty and leads to negative changes in the way they perceive each other and behave towards each other.

Given that past research has shown both the SN approval of a romantic relationship, and the perceptions of a romantic gift can influence individuals' perceptions of their relationships, it

is possible that the *SN approval of a romantic gift* could also influence relationship perceptions. Since gifts are effective signals of relationship commitment, perhaps a receiver would perceive even greater relationship commitment from the giver if his/her own social network approves of the gift rather than disapproves of it. Since there are no known studies which have investigated the effects of social influence in the context of gift giving, findings from this study would provide novel contributions to the existing literature.

Relationship Satisfaction and Perceived Partner Commitment

Past studies have shown that relationship satisfaction is related to the extent of positive bias an individual shows towards their partner; the more satisfied a person is with their relationship, the more positive bias they display (Etcheverry et al., 2008). Murray, Holmes, Dolderman and Griffin (2000) attributed this to the fact that people who are more satisfied with their relationships are more motivated to maintain a positive view of their relationships. Their study found that individuals who were highly satisfied with their relationships displayed the *positive illusions* effect in that they perceived their partners in a more enhanced view as compared to the way their friends perceived their partners. On the other hand, individuals who were less satisfied with their relationships displayed the *tainted image* effect in that they viewed their partners either in the same way or less positively than their friends did.

To extend these findings to the context of the current study, I would expect individuals who are highly satisfied with their romantic relationships to be minimally affected by external influences which could affect their relationship perceptions such as gift cost and SN approval of the gift. This is because they have been found to be more motivated to maintain the positive perceptions they have of their relationships. On the other hand, individuals who are less satisfied with their relationships would be less motivated to maintain a positive view of their relationships

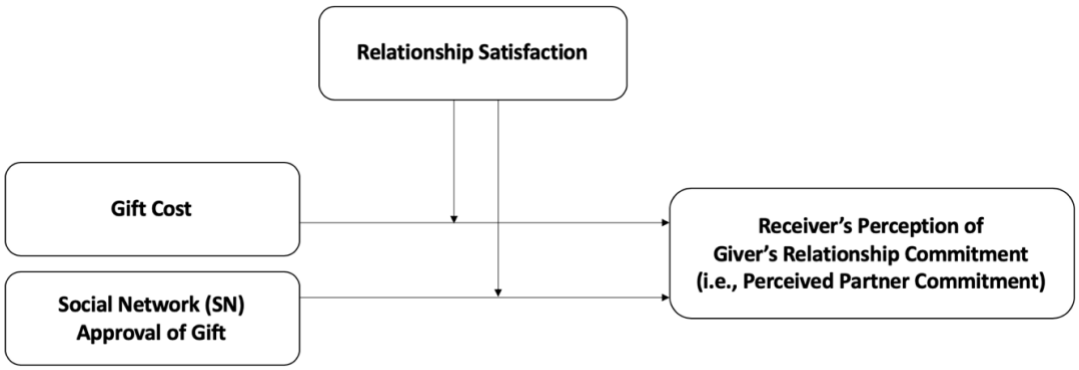
such that they are more affected by external factors such as gift cost and SN approval. Hence, I would expect relationship satisfaction to moderate the effects of gift cost and SN approval on perceived partner commitment.

Present Study

Given the aforementioned theoretical considerations, the following model in Figure 1, as well as the specific hypotheses listed below were conceptualized:

Figure 1

Overall Hypothesized Model of Main Effects and Interaction Effects



H_1: A significant positive main effect of gift cost on perceived partner commitment. As gift cost increases, individuals would perceive their partners as more committed to their relationship.

H_2: A significant positive main effect of SN approval of the gift on perceived partner commitment. As SN approval increases, individuals would perceive their partners as more committed to their relationship.

H_3: A significant positive main effect of relationship satisfaction on perceived partner commitment. As relationship satisfaction increases, individuals would perceive their partners as more committed to their relationship.

*H*4: Relationship satisfaction would negatively moderate the effect of gift cost on perceived partner commitment. The more satisfied a person is with their relationship, the weaker the effect of gift cost on perceived partner commitment.

*H*5: Relationship satisfaction would negatively moderate the effect of SN approval of the gift on perceived partner commitment. The more satisfied a person is with their relationship, the weaker the effect of SN approval of the gift on perceived partner commitment

There were no predictions made with regards to a two-way interaction effect between gift cost and SN approval; nor a three-way interaction between gift cost, SN approval and relationship satisfaction. This is due to the lack of existing research to base such predictions upon. Nonetheless, these possible interactions were added to the overall model for exploratory analyses. In addition, *own relationship commitment* was added as an alternative dependent variable (DV). This was included because most studies on gift receipt had focused on its effects on perceived partner commitment (Belk & Coon, 1993; Komiya et al., 2018; Yamaguchi et al., 2015); however, no studies to my knowledge had investigated the effect of gift receipt on one's own relationship commitment. Given this lack of knowledge, no predictions were made as well.

Method

The main study was a 20-minute online questionnaire. The design was a between-subjects 2 (gift cost: low vs high) x 2 (SN approval of the gift: disapproval vs approval) x relationship satisfaction design. Gift cost and SN approval were manipulated dichotomous variables, whereas relationship satisfaction was a measured continuous variable.

Participants

Participants were 228 (114 men and 114 women) Singapore Management University (SMU) undergraduates who signed up for the study through the school's subject-pool system. Their ages ranged between 18 and 28 years. Seventy-eight of these participants signed up to be rewarded with school-based research credit, whereas the remaining 150 of them signed up to be rewarded with SGD$5 in cash. The requirements for participation were that participants had to be between the ages of 18 and 30 years, and they had to be in an established romantic relationship for at least 3 months at the time of participation. One participant was excluded from further analyses for failing both the attention check questions. Ten of the remaining participants had failed one out of the two questions, but further analysis of their responses revealed that there was no reason to believe these participants had not read the other questions carefully. Hence, their responses were still included in the data analysis and the final number of participant responses analysed was 227 (114 men and 113 women).

The duration of relationships ranged from 3 months to 9 years with most participants being in relationships for less than 3 years. Almost all participants were dating exclusively with the exception of one participant who was dating casually (i.e., open to dating other people besides their partners), and one participant who was married with children.

Materials

Gift Cost (Independent Variable 1; IV1). Gift cost was manipulated using vignettes adapted from Robben and Verhallen's (1994) experimental study. In their study, some of the vignettes described scenarios in which the participant's acquaintance decided to buy the participant a birthday gift. The overall cost of this gift was varied between conditions by varying the financial cost (money), as well as the psychic cost (time and effort) incurred by the giver to

obtain the gift. Similarly, in the present study, a high-gift-cost vignette suggested that obtaining the gift required a large investment of money (high financial cost), time and effort (high psychic cost); whereas a low-gift-cost vignette suggested that obtaining the gift did not require much investment of money (low financial cost), time, nor effort (low psychic cost).

The vignettes in this study were adapted to the Singapore context as the vignettes from the original Robben and Verhallen (1994) study mentioned bicycle rides which are more common as a mode of transport in the Netherlands where the experiment was conducted; but not as common in Singapore. Additionally, since this current study is investigating romantic gift giving, the giver is the participant's romantic partner instead of an acquaintance; and the gift is an anniversary gift instead of a birthday gift. Each participant was asked to provide the name and gender of their partner for these details to be incorporated into the vignette. The name "Jane" will be used as an example here and the high gift cost vignette is shown first:

> *"Imagine it is your anniversary with Jane and you have both gotten each other gifts. You found out from Jane's best friend how Jane got your gift, and the situation can be described as follows: Jane had been planning to get the perfect gift for you for months. After work, on the evening dedicated to purchasing this gift, it was raining cats and dogs; a very unpleasant day to go anywhere but home. The item for your anniversary gift could only be found at a shop that was very far away and difficult to get to, but Jane still went to get it. When she found the present, it seemed to cost much more than she had expected to spend on it, but she bought it for you anyway. Over the next week, she went to many different shops to find the perfect gift box and wrapping paper of the best quality, before wrapping it and presenting it to you as an anniversary gift."*

On the other hand, the low gift cost vignette is shown here:

> *"Imagine it is your anniversary with Jane and you have both gotten each other gifts. You found out from Jane's best friend how Jane got your gift, and the situation can be described as follows: Despite having a significant amount of free time in the months leading up to your anniversary, Jane did not*

plan ahead for the purchase of your gift because she thought she wouldn't need much time for it. As a result, she ended up without a gift for you on the morning of your anniversary. Before meeting you on that anniversary day itself, she saw a convenience store at the train station on the way and decided to see if she could find a gift for you there. Within the first five minutes, she had chosen a gift, and the item she chose ended up costing much less than the amount she would spend on a daily meal. Without any additional wrapping or even a nice bag to carry it in, she presented it to you as an anniversary gift when you two met."

Participants were randomly assigned to either the high or low gift cost condition, and they were asked manipulation check questions after reading the vignette. These questions asked participants to rate, on a 7-point scale (1 = *extremely low amount*; 7 = *extremely high amount*), how much they thought their partners had spent on the gift in terms of: (i) money, (ii) time and effort, and (iii) the overall cost in terms of money, time and effort. Distractor questions were included as well to discourage participants from guessing the true objective of the study (see Appendix A for full details).

Social Network Approval of the Gift (IV2). SN approval of the gift was manipulated by providing participants with alleged feedback from their social network members on the gift from the gift-giving scenario earlier. Participants were first asked to list down three of their social network members whom they considered as their closest family members and/or friends who knew about their relationship. They were then told to imagine that after receiving the anniversary gift mentioned in the previous gift-giving scenario, they had shared a photo of this gift with these three family members and/or friends who subsequently responded with some comments. In the SN approval condition, the comments from the SN members were unanimously positive; whereas in the SN disapproval condition, the comments were unanimously negative. Participants were randomly assigned to either of these two conditions. The approval/disapproval was

presented in the form of a screenshot image of a fictitious conversation between the participant and the three social network members in a text-messaging application (i.e., WhatsApp). Participants were asked a simple manipulation check question afterwards, asking them whether they thought their family members and/or friends had approved or disapproved of the gift. A distractor question was included as well to discourage participants from guessing the true objective of the study (see Appendix B for full details).

Relationship Satisfaction (IV3). This was a pre-manipulation variable measured before both the gift cost and SN approval manipulations. The Kansas Marital Satisfaction Scale (KMSS; Schumm, Nichols, Schectman & Grigsby, 1983) was adapted for use as it had been identified as the most reliable relationship satisfaction scale due to its brevity, as well as lack of overlap with the determinants and consequences of relationship satisfaction (Graham, Diebels & Barnow, 2011). It had also been approved by Shek and Tsang (1993) for use with non-Western samples which is an advantage since the current study is set in Singapore which is a Southeast Asian country. The scale was a short 3-item scale which asked participants how satisfied they were with: (i) their relationship, (ii) their relationship with their partner, and (iii) their partner as a partner (see Appendix C for exact phrasing). Responses were rated on a 7-point Likert scale (1 = *extremely dissatisfied*; 7 = *extremely satisfied*).

Perceived Partner Commitment (DV). This was a post-manipulation variable measured after both the gift cost and SN approval manipulation scenarios. Participants were reminded to recall these two scenarios and have them in mind when answering the commitment items. The 2-item scale consisted of questions adapted from Lund's Commitment Scale (1985). Only these two items were chosen out of Lund's nine items because they measured *perceived commitment* while the other items measured actual commitment. Both questions started with the phrase,

"based on the current situation", and participants were asked: (i) how committed their partner seemed to be to the relationship, and (ii) how likely their partner was to continue the relationship for the long term (see Appendix D for exact phrasing). The two items were adapted for this study. The phrase "seem to be" was added to the first item to emphasize the *perceived* commitment, while the phrase "for the long term" was added to the second item to implement a time frame for clarity. Responses were rated on a 7-point Likert scale (1= *extremely uncommitted/unlikely*; 7 = *extremely committed/likely)* with separate scales for each of these two items.

Receiver's Own Relationship Commitment (Exploratory DV). The participant's own relationship commitment was measured by asking them how likely they were to continue the relationship for the long term. This was asked immediately after the two aforementioned questions on perceived partner commitment and was phrased in a similar manner (see Appendix E for exact phrasing).

Procedure

Participants signed up for the study titled, "Relationship Attitudes and Preferences" through the SMU subject pool system and they were sent an e-mail with a link to the online survey shortly after. They were told that the purpose of the study was to better understand individuals' interpersonal relationships with their romantic partner, family members and friends; and that the full objective of the study would only be revealed after completion to maintain scientific validity. They were informed that they had to do the survey alone in an environment free from distractions, and attention checks were included to ensure participants complied. After reading an informed consent form, they were asked to confirm that they were in a romantic relationship which had been established for at least 3 months at the point of participation, and

they were asked for their age. Participants who did not meet the eligibility criteria were directed out of the survey.

Eligible participants were then asked for their partner's name as well as whether their partner identified himself/herself as a "he/she". These two details were used as *piped text* which refers to the insertion of details into subsequent questions or texts to make them more relatable to the participant. For example, if the participant had typed their partner's name as "Jane" and selected "she", an example of a subsequent piped text would be: "*Jane* did not plan ahead for the purchase of your gift because *she* thought *she* wouldn't need much time for it*"*. After this, participants were presented with the relationship satisfaction scale (IV3) together with other unrelated scales used to prevent participants from guessing the real objective of the study. Next, the gift cost manipulation (IV1) was presented to participants before the SN approval manipulation (IV2) as the gift cost vignette set the scenario for the SN approval of the gift to be relevant later. As mentioned in the previous section, manipulation checks as well as distractor questions were added after each of these manipulations. Upon completion of both manipulations, the main DV (i.e., perceived partner commitment) was immediately measured before the exploratory DV (own relationship commitment) and other distractors were measured. Participants then answered a suspicion check question which asked them to guess the objective of the study. The last few questions were standard demographic questions such as gender, sexual orientation, specific relationship status (i.e., dating exclusively, dating casually, engaged to marry, married without children, married with children, others), relationship duration, and household income (i.e., own and partner's).

Two attention check questions were included; one in the beginning of the questionnaire and one towards the end. They were both embedded in two of the distractor scales which were

longer than the other scales. This was planned as such because participants would have had a higher chance of rushing through the questions in longer scales without reading them. Both these questions required participants to select the "Neither Disagree nor Agree" option. Upon completion of all the sections listed above, participants read a debriefing letter in which they were informed of the true objective of the study, as well as the fact that any personally-identifying data (i.e., the names of their partner, family members and/or friends) would be permanently deleted from the database once they had been compensated for their participation in the study. Lastly, they were given a random-generated 6-digit confirmation code which they had to email to the experimenter for compensation since they had not been asked to provide their own names. This was done to ensure that the responses remained completely anonymous.

Results

Preliminary Analyses

An alpha level of .05 was used for all statistical tests in this study. Random assignment of participants to the four experimental conditions resulted in the following sample distribution: high gift cost–SN approval (N = 57; 51% female), low gift cost–SN approval (N = 57; 44% female), high gift cost–SN disapproval (N = 53; 59% female), and low gift cost–SN disapproval (N = 60; 47% female).

All the important variables in this study were measured on 7-point Likert scales. Thus, the score for each continuous variable was averaged across the number of items in that particular scale. This included the gift cost manipulation check (three items, α = .97), relationship satisfaction (three items, α = .95), and perceived partner commitment (two items, α = .94). Therefore, each of these variables had a range of values from 1 to 7, with a higher score indicating a higher value of that variable. On the other hand, for the categorical variables which

were gift cost and SN approval, low gift cost and SN disapproval were dummy coded as '0', while high gift cost and SN approval were coded as '1'. This was done so that an increase of 1 unit of either of these variables could be interpreted as a change from low to high gift cost, or from SN disapproval to SN approval.

Gift Cost Manipulation Check. The manipulation check scores ranged from 1 to 7 after the scores were averaged between the three items in the scale. This score represented the participant's perception of the gift cost based on time, money and effort, with a higher score indicating higher perceived gift cost. An independent samples *t*-test was conducted. The results of Levene's test indicated unequal variances between the high and low gift cost conditions, F (1, 225) = 78.03, $p < .001$. Thus, a *t*-statistic without the assumption of homogeneity of variance was computed and the results showed that there was a statistically significant effect of gift cost manipulation on the perceived gift cost, $t(145) = 34.03$, $p < .001$. Individuals in the high gift cost condition perceived the gift cost to be higher ($M = 6.45$, $SD = 0.42$) than those in the low gift cost condition ($M = 2.44$, $SD = 1.20$). Hence, gift cost was effectively manipulated.

SN Approval Manipulation Check. The manipulation check variable was measured by asking participants to choose which statement best described the screenshot they had seen. The options were either that their SN members had disapproved of the gift, or that they had approved of it. A chi-square test of independence revealed that there was a significant association between the SN approval manipulation and the perceived approval measure, χ_2 (1) = 211.28, $p < .001$. For those assigned to the SN approval condition, 98.2% of them perceived the screenshot to be indicating approval from their family members and/or friends. The result was the similar for those in the SN disapproval condition ; 98.2% of them perceived the screenshot to be indicating disapproval. Hence, SN approval was effectively manipulated.

Relationship Satisfaction as a Measured Variable. The relationship satisfaction score was averaged from the scores of the three items in the scale, and the scores ranged from 1 to 7 with a higher score reflecting higher relationship satisfaction. The variable was non-normally distributed, with skewness of –2.181 (*SE* = 0.16), kurtosis of 7.50 (*SE* = 0.32), and a median score of 6.33 (*M* = 6.20, *SD* = 0.91). This meant that most participants rated their relationship satisfaction relatively highly (i.e., between "*moderately satisfied*" and "*extremely satisfied*"). Interestingly, an analysis of gender differences showed that there was a statistically significant effect of gender on relationship satisfaction, $t(225) = 2.41$, $p = .017$, with men reporting higher relationship satisfaction (*M* = 6.34, *SD* = 0.76) than women (*M* = 6.05, *SD* = 1.02).

Perceived Partner Commitment as a DV. The perceived partner commitment score was averaged from the scores of two items in the scale. Responses included the full range of scores from 1 to 7, with a higher score reflecting higher perceived partner commitment. The variable was non-normally distributed, with skewness of –1.297 (*SE* = 0.16), kurtosis of 0.738 (*SE* = 0.32), and a median score of 6.00 (*M* = 5.74, *SD* = 1.46). This meant that most participants rated their partners' commitment relatively highly (i.e., between "*moderately*" and "*extremely*"). An analysis of the distribution of this variable revealed the following mean and standard deviation values for each condition: high gift cost–SN approval (M = 6.54, SD = 0.17), low gift cost–SN approval (M = 5.50, SD = 0.17), high gift cost–SN disapproval (M = 6.27, SD = 0.18), low gift cost–SN disapproval (M = 4.75, SD = 0.17).

Gender Effects. A preliminary moderated regression analysis was conducted to test if there were any two- or three-way interaction effects between gender and the three IVs, on perceived partner commitment. The results showed that none of the effects were significant. In particular, gender was not a significant predictor of commitment, $b = 0.109$, $t = 0.67$, $p = .503$,

and it did not significantly interact with any of the three IVs: gift cost (b = -0.002, t = -0.01, p = .995), SN approval (b = -0.079, t = -0.24, p = .808), and relationship perception (b = -0.266, t = -1.53, p = .128). The two 3-way interaction effects were not significant either: "gift cost x relationship satisfaction x gender" (b = 0.100, t = 0.28, p = .780), and "SN approval x relationship satisfaction x gender" (b = -0.590, t = -1.57, p = .118). Given this lack of gender effects, the data was collapsed across gender for subsequent analyses.

Main Analyses

Method of Analyses. A three-step hierarchical moderated regression analysis was used to test the hypothesized main effects and interaction effects (Figure 1), as well as the exploratory analysis involving the "gift cost x SN approval" interaction. The DV was perceived partner commitment. The process followed standard practice; since relationship satisfaction was a continuous variable, it was standardized to ensure that the mean was centered and the standard deviation was equal to 1. This was done to reduce the problem of multicollinearity and maximize interpretability (Aiken & West, 1991). Three 2-way interaction terms were created by multiplying their component IVs together: "gift cost x relationship satisfaction", "SN approval x relationship satisfaction" and "gift cost x SN approval". One 3-way interaction term was created as well: "gift cost x SN approval x relationship satisfaction". In Step 1 of the hierarchical regression, the three IVs (gift cost, SN approval, and relationship satisfaction) were added as a group. This was followed by the three 2-way interaction terms in Step 2, and the only three-way interaction term in Step 3.

For every interaction effect that was significant, additional regression analyses were conducted to test the statistical significance, direction and coefficients of the simple slopes. This was done by first creating two new variables: low relationship satisfaction (-1SD) and high

relationship satisfaction (+1SD). The former was computed by adding 1 to the standardized relationship satisfaction variable while the latter was computed by subtracting 1 from it. Two new interaction terms were subsequently created; the first one involved multiplying the relevant IV with low relationship satisfaction, and the second involved multiplying the relevant IV with high relationship satisfaction. The relevant IV refers to whichever variable had a significant interaction effect with relationship satisfaction in the main moderation analysis; i.e., gift cost and/or SN approval. Lastly, the same three-step moderated regression analysis was run twice more; the first regression substituted relationship satisfaction for low relationship satisfaction (-1SD), while the second regression used high relationship satisfaction.

To plot the graphs of the simple slopes, two values from Model 2 of each relationship satisfaction level (low and high) were used. With reference to gift cost as an example, these two values would be the *constant* value which refers to the perceived partner commitment when gift cost was 0 (low), as well as the coefficient of the simple main effect of gift cost which refers to the increase in perceived partner commitment as gift cost increases by 1 unit. Given that the two predictor variables (gift cost and SN approval) were both dichotomous and dummy coded as '0' and '1', the perceived partner commitment at high gift cost could be calculated by adding the coefficient of the simple main effect of gift cost to the constant value. This would result in four different points for the simple slope graphs to be plotted: low gift cost–low relationship satisfaction, high gift cost–low relationship satisfaction, low gift cost–high relationship satisfaction, high gift cost–high relationship satisfaction.

Results of Analyses. The results of the first moderated regression analysis are presented in Table 1 below. Model 1 was used to test the main effects, Model 2 tested the three 2-way interaction effects, and Model 3 tested the only 3-way interaction effect.

Table 1
Moderated Analysis Table with Gift Cost, SN Approval, Relationship Satisfaction, and their Interactions, on Perceived Partner Commitment

		Unstandardized coefficients		*Standardized coefficients*			*95% CI*		*Model Significance*			
Model	*Predictor*	*B*	*SE*	*β*	*t*	*p*	*LL*	*UL*	R^2	R^2 Change	*F Change*	*Sig. F Change*
1	**Main Effects**								.331	.331	36.829	.000
	(Constant)	4.755	.137	-	34.791	.000	4.486	5.025				
	Gift cost (GC)	1.364	.160	.469	8.522	.000	1.049	1.679				
	SN approval (SNA)	.654	.161	.225	4.057	.000	.336	.971				
	Relationship satisfaction (RelSat)	.469	.081	.322	5.794	.000	.310	.629				
2	**Two-way Interactions**								.363	.031	3.621	.014
	(Constant)	4.671	.153	-	30.492	.000	4.369	4.973				
	GC x RelSat	-.525	.165	-.276	-3.175	.002	-.851	-.199				
	SNA x RelSat	.021	.176	.012	.119	.905	-.325	.367				
	GC x SNA	-.371	.319	-.111	-1.162	.247	-1.000	.258				
3	**Three-way Interaction**								.367	.005	1.578	0.210
	(Constant)	4.685	.153	-	30.544	.000	4.382	4.987				
	GC x SNA x RelSat	-.440	.351	-.200	-1.256	.210	-1.132	.251				

Notes. Gift cost: 0 = low gift cost, 1 = high gift cost. SN approval: 0 = SN disapproval, 1 = SN approval. Relationship satisfaction: standardized with mean = 0, *SD* = 1.

The R_2 value in the first step showed that Model 1 (main effects of three IVs) explained 33.1% of the variance in perceived partner commitment, and this model was significant, R_2 = .331, $F(3, 223) = 36.83$, $p < .001$. Model 2 (three main effects and three 2-way interaction effects) explained 36.3% of the variance, R_2 = .363, $F(6, 220) = 20.87$, $p < .001$, which was a significant increase of 3.1%, R_2 *Change*= .031, *F Change*$(3, 220) = 3.62$, $p = .014$. This meant that at least one of the three interaction effects had a statistically significant effect on perceived partner commitment. Lastly, Model 3 (three main effects, three 2-way interaction effects, and one 3-way interaction effect) explained 36.7% of the variance, $R_2 = .367$, $F(7, 219) = 18.17$, $p <$ .001, and this was an increase of 0.5% which was not significant, R_2 *Change*= .005, *F Change*$(1, 219) = 1.58$, $p = .210$. This meant that the three-way interaction between gift cost, SN approval and relationship satisfaction, on perceived partner commitment was not significant. The rest of the results will be explained in relation to their respective hypotheses.

Gift Cost Main Effect (H_1). It was hypothesized that as gift cost increased, individuals would perceive their partners as more committed to their relationships. The results of the regression analysis supported this prediction; there was a statistically significant main effect of gift cost on perceived partner commitment, $b = 1.364$, $t = 8.52$, $p < .001$. Since low gift cost was coded as '0' and high gift cost as '1', the results showed that as gift cost increased by 1 unit (from low to high), perceived partner commitment increased by 1.364 units on the 7-point scale. Hence, H_1 was supported as there was a significant positive main effect of gift cost on perceived partner commitment.

SN Approval Main Effect (H_2). Similarly, it was hypothesized that as SN approval increased, individuals would perceive their partners as more committed to their relationships. The results of the regression analysis supported this prediction; there was a statistically significant main effect of SN approval of the gift on perceived partner commitment, $b = 0.654$, $t = 4.06$, $p < .001$. Since SN disapproval cost was coded as '0' and SN approval as '1', the results showed that as SN approval increased by 1 unit (from disapproval to approval), perceived partner commitment increased by 0.654 units on the 7-point scale. Hence, H_2 was supported as there was a significant positive main effect of SN approval of the gift on perceived partner commitment.

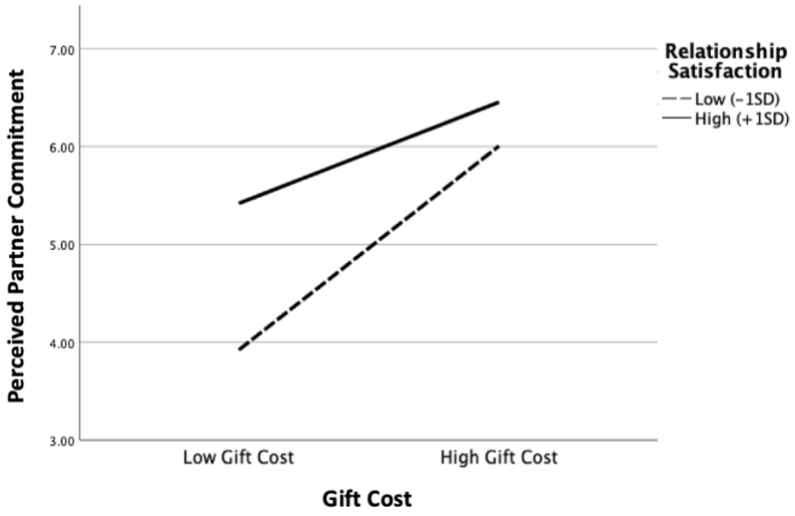
Relationship Satisfaction Main Effect (H_3). The third hypothesis was that individuals would perceive their partners as more committed to their relationship as relationship satisfaction increased. The results of the regression analysis supported this prediction; there was a statistically significant main effect of relationship satisfaction on perceived partner commitment, $b = 0.469$, $t = 5.79$, $p < .001$. Since relationship satisfaction was standardized, the results showed that a 1SD increase in relationship satisfaction increased perceived partner commitment by 0.469

units on the 7-point scale. Hence, H_3 was supported as there was a significant positive main effect of relationship satisfaction on perceived partner commitment.

Gift Cost and Relationship Satisfaction Interaction Effect (H_4). Moving on to the first hypothesized moderation effect, it was predicted that relationship satisfaction would negatively moderate the effect of gift cost on perceived partner commitment such that the effect of gift cost was weaker for those who were more satisfied with their relationships. The results supported this hypothesis by showing that the "gift cost x relationship satisfaction" interaction was significant, $b = -0.525$, $t = -3.18$, $p = .002$. An analysis of the simple slopes revealed that the positive effect of gift cost on perceived partner commitment was stronger when relationship satisfaction was low (-1*SD*), $b = 2.084$, $t = 7.10$, $p < .001$, as compared to when it was high (+1*SD*), $b = 1.034$, $t = 3.93$, $p < .001$. This supported the specific prediction of H_4 that the effect of gift cost was weaker the more satisfied a person was with their relationship. The graphs of the simple slopes can be found in Figure 2 below.

Figure 2

Graphs of Simple Slopes for the Interaction Between Gift Cost and Relationship Satisfaction on Perceived Partner Commitment



SN Approval and Relationship Satisfaction Interaction Effect (H_5). The last hypothesis also predicted a negative moderation effect, with relationship satisfaction moderating the effect of SN approval on perceived partner commitment such that the effect of SN approval was weaker for those who were more satisfied with their relationships. The results showed that the interaction effect was not statistically significant, $b = 0.021$, $t = 0.12$, $p = .905$. Hence, H_5 was not supported.

Exploratory Analyses

Exploratory Effects on Perceived Partner Commitment. The interaction effect between gift cost and SN approval on perceived partner commitment was not statistically significant, $b = -0.371$, $t = -1.16$, $p = .247$. Neither was the three-way interaction effect between gift cost, SN approval, and relationship satisfaction, $b = -0.440$, $t = -1.26$, $p = .210$.

Own Relationship Commitment as an Exploratory DV. As mentioned earlier, own relationship commitment was added as an exploratory DV. The analysis was conducted in a similar manner to the main analysis except for a substitution of the DV. Own relationship commitment was measured with a 1-item 7-point scale; a higher score reflected higher own relationship commitment. The results showed that Model 1 (main effects of three IVs) explained 35.8% of the variance in own relationship commitment, and this model was significant, $R^2 = .358$, $F(3, 223) = 41.51$, $p < .001$. Model 2 (three main effects and three 2-way interaction effects) explained 4.8% more variance than Model 1 and this was considered a significant increase, R^2 *Change*$= .048$, *F Change*$(3, 220) = 5.91$, $p = .001$. This meant that at least one of the three interaction effects had a statistically significant effect on own relationship commitment. Lastly, Model 3 (three main effects, three 2-way interaction effects, and one 3-way interaction effect) explained 41.8% of the variance, which was a significant increase of 1.2%, R^2 *Change*=

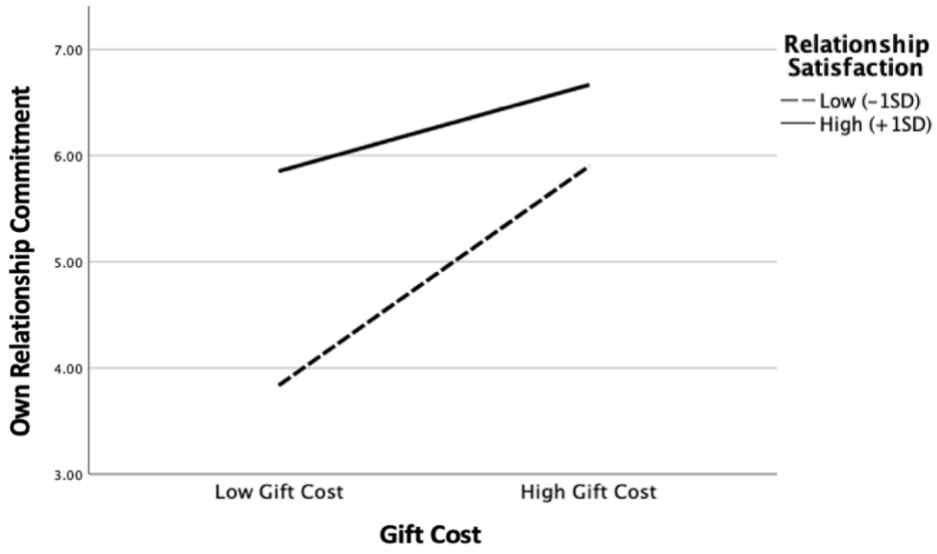
.012, *F Change*(1, 219) = 4.60, p = .033. This meant that the three-way interaction between gift cost, SN approval and relationship satisfaction, on own relationship commitment was significant.

Specifically, there were significant main effects of gift cost, b = 1.224, t(219) = 7.94, p < .001, SN approval, b = 0.562, t(219) = 3.63, p < .001, and relationship satisfaction, b = 0.626, t(219) = 8.03, p < .001. There was also a significant interaction effect between gift cost and relationship satisfaction, b = -0.626, t(219) = -3.99, p < .001. There was no statistically significant interaction effect between SN approval and relationship satisfaction, b = -0.047, t(219) = -0.28, p = .780; as well as between gift cost and SN approval, b = -0.424, t(219) = -1.40, p = .163. Lastly, there was a statistically significant three-way interaction effect between gift cost, SN approval, and relationship satisfaction, b = -0.709, t(219) = -2.15, p = .033.

An analysis of simple slopes for the gift cost and relationship satisfaction interaction was conducted and it revealed that the positive effect of gift cost on own relationship commitment was stronger when relationship satisfaction was low (-1*SD*), b = 2.066, t(219) = 7.42, p < .001, as compared to when it was high (+1*SD*), b = 0.814, t(219) = 3.27, p = .001. Thus, the interaction effect between gift cost and relationship satisfaction seemed to be similar for both perceived relationship commitment and own relationship commitment as DVs. The graphs of the simple slopes can be found in Figure 3 below.

Figure 3

Graphs of Simple Slopes for the Interaction Between Gift Cost and Relationship Satisfaction on Own Relationship Commitment

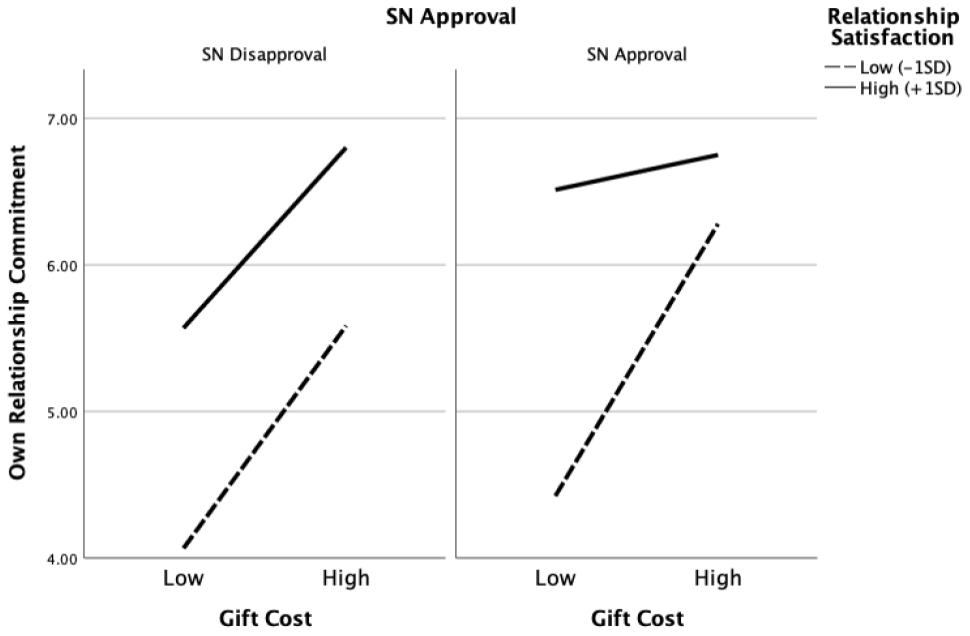


An analysis of the simple slopes for the three-way interaction between gift cost, SN approval, and relationship satisfaction was also conducted using PROCESS Model 3 (Hayes, 2017). Since the only significant two-way interaction was between gift cost and relationship satisfaction, SN approval was tested as a moderator of this moderation effect. The results revealed that SN approval was indeed a significant moderator; the 'gift cost x relationship satisfaction' interaction was not significant in the SN disapproval condition b = -0.152, $F(1, 219) = 0.32$, $p = .573$; but significant in the SN approval condition b = -0.861, $F(1, 219) = 20.48$, $p < .001$. The graphs of the simple slopes are shown in Figure 4 below. A further test of the significance of these simple slopes revealed that the following slopes were significant: 'SN disapproval with low relationship satisfaction', $b = 1.518$, $t(219) = 4.04$, $p = .001$, 'SN disapproval with high relationship satisfaction, $b = 1.232$, $t(219) = 4.30$, $p < .001$, 'SN approval

with low relationship satisfaction, $b = 1.856$, $t(219) = 6.78$, $p < .001$. However, the slope for SN approval with high relationship satisfaction was not significant, $b = 0.238$, $t(219) = 0.85$, $p = 397$.

Figure 4

Graphs of Simple Slopes for the Moderated Moderation Effect of SN Approval on the Interaction Between Gift Cost and Relationship Satisfaction, on Own Relationship Commitment



General Discussion

Discussion of Results

Gift Cost and Relationship Satisfaction. The results showed that when individuals received gifts from their romantic partners, those who received more costly gifts tended to perceive their partners as more committed to their relationship than those who received less costly gifts. This was consistent with numerous past studies which found that gifts were effective signals of commitment from the giver to the receiver. The first novel contribution of this study

was the investigation of whether people would be differentially sensitive to gift cost depending on how satisfied they were with their relationships. While there were many studies which investigated how gift cost and relationship satisfaction affected perceived partner commitment separately, this was the first known study to combine these two effects. It was predicted that gift receivers who were less satisfied with their relationships would be more influenced by the cost of the gift as compared to those who were more satisfied, and this prediction was supported. This implies that gift cost can only effectively increase perceived commitment to a certain extent; there are other contributing factors such as relationship satisfaction which may limit the effectiveness of costly gifts. Future research should consider investigating other boundary conditions of this effect.

Social Approval. The second novel contribution of this study was the research finding showing that gift receivers were affected by their family members and/or friends' opinions of the gift they received from their romantic partners. Many studies on romantic relationships have investigated the influence of SN approval on relationship perceptions, and many studies have investigated the influence of gift cost on perceived partner commitment; however, this was the first study to investigate the effect of SN approval *of the gift itself* rather than the relationship. It was predicted that gift receivers whose SN members approved of the gift would perceive their partners as more committed to their relationship as compared to gift receivers whose SN members disapproved of the gift, and this prediction was supported. This implies that gift givers should take the gift receiver's family members and friends' opinions into account when deciding on a gift. Although it was not studied here, perhaps when the SN members approve of a romantic gift, they would be more inclined to approve of the romantic relationship as well given that the gift symbolizes the giver's commitment to the receiver. On the other hand, family members and

friends must also learn to be more mindful of the comments they make to the gift receiver with regards to the gift, given that these comments may influence the receiver's perceptions of his/her relationship with the giver, which could eventually affect relationship outcomes.

Similar to the earlier prediction with regards to the interaction effect of gift cost and relationship satisfaction, it was predicted that gift receivers would also be differentially sensitive to SN approval of the gift depending on how satisfied they were with their relationships. Specifically, it was expected that gift receivers who were less satisfied with their relationships would be more influenced by SN approval as compared to those who were more satisfied with their relationships. In contrast to expectations, this prediction was not supported in this study. The results indicated that the effect of SN approval on perceived partner commitment did not significantly change as relationship satisfaction increased.

Given that relationship satisfaction significantly moderated the effect of gift cost, but did not moderate the effect of SN approval, an explanation of this result requires a comparison between the effect of gift cost and that of SN approval. After each of these manipulations, participants were asked to answer an open-ended question which had been included as a distractor question. For gift cost, it was, "How do you feel about receiving such a gift for your anniversary?"; and for SN approval, it was, "Why do you think your family members and/or friends reacted that way?". Although no statistical tests had been conducted, a brief scan of these responses showed that for gift cost, when participants described how they felt as a result of the high or low cost, they simply described the amount of money, time, and/or effort spent as the reason they felt positive or negative about the gift. On the other hand, when participants were asked why they thought their SN members reacted a certain way towards the gift, many of them mentioned that their SN members either approved of the gift because they were supportive of the

relationship or disapproved of the gift because they were unsupportive of the relationship. This shows that from SN approval of the gift alone, receivers somehow managed to infer SN approval *of the relationship* as well.

To relate this to relationship satisfaction, when a person who is highly satisfied receives a low-cost gift, it may be easier for them to conjure excuses for their partner to make themselves feel better. Some of these responses supported this: "…it's the thought that counts and I am happy I received a gift regardless of what it is"; "…albeit a little sad, I will be okay afterwards because at least she remembered our anniversary"; "…while it's a gift that doesn't have much thought behind it, I am ok as I am not a 'gifts' person". On the other hand, when a highly satisfied person receives disapproval from their SN members about the gift, it may cause them to reflect on whether their SN members approve of their relationship; and this may result in a more confounded effect which cannot simply be moderated by relationship satisfaction. Future research should take this into account by controlling for the participants' perception of their SN members' approval of their relationship. It is also worth considering that perhaps there could be cultural differences in that people from more interdependent cultures may relate the SN approval of the gift to the SN approval of the relationship more than people from independent cultures would.

Own Relationship Commitment. The third and final novel contribution of this study was the exploratory analysis of own relationship commitment as an alternative DV. The pattern of results was mostly similar to that of perceived partner commitment as a DV; except that there was a significant three-way interaction effect between gift cost, SN approval, and relationship satisfaction. An analysis of this moderated moderation effect with SN approval as the moderator revealed that when there was SN disapproval, relationship satisfaction did not significantly

moderate the effect of gift cost on own relationship commitment such that gift cost had a significant positive effect on own relationship commitment regardless of relationship satisfaction. On the other hand, when there was SN approval, relationship satisfaction significantly moderated the effect of gift cost on own relationship commitment. Specifically, for receivers who were less satisfied with their relationships, an increase in gift cost significantly increased own relationship commitment, but for those who were more satisfied with their relationships, this increase in gift cost did not have a significant effect on own relationship commitment. This means that gift cost does influence own relationship commitment, just not when both relationship satisfaction and SN approval are high. In such a situation, a receiver would rate their own relationship commitment as similar regardless of the cost of the gift.

Further studies need to be done to better understand this effect. Since most past studies only investigated the effects of gift cost on perceived partner commitment, the findings from this study provide the first empirical evidence that a receiver's own commitment is also affected by gift cost and SN approval of the gift. This implies that gift giving is more mutually beneficial than most studies make it out to be; apart from the receiver benefiting from the assurance of commitment from the giver, the giver also benefits from an increase in commitment from the receiver.

Limitations

There were two main limitations identified in the present study. Firstly, the manipulation of SN approval was not as effective as it could be. In the questionnaire, after the SN approval manipulation, participants were asked one open-ended question which was meant to be a distractor question: "Why do you think your family members and/or friends reacted that way?". A brief analysis of the responses revealed that some participants were of the opinion that the SN

approval manipulation screenshots were not relatable for several reasons. Firstly, some mentioned that since they listed both their family members and friends, it was difficult to imagine why these two groups would be in the same group chat together. Secondly, others mentioned that they could not imagine their SN members sending the type of messages shown in the screenshots. Thirdly, the names in the screenshots were "Family/Friend x" (in which x was a number from 1 to 3), instead of the SN members' actual names (due to constraints imposed by the university's ethics board). Lastly, language could also be a factor since some family members or friends would not usually communicate with the participant in English. Researchers who wish to replicate this study need to address this issue by creating more relatable SN approval manipulations. This could lead to an increase in the effect size of SN approval on commitment.

A second limitation was that a *no gift* control was absent from this study. It was thus impossible to determine whether the low-cost gift decreased perceived partner commitment, or the high-cost gift increased commitment. It is also impossible to determine whether the low-cost gift decreased perceived commitment or increased it to a smaller extent than the high-cost gift. Future research could look into this because both directions seem plausible. It may also be good to use a repeated measures design whereby perceived partner commitment would be measured as both pre- and post-manipulation variables. This was not done in this study as the questionnaire was too short that participants would probably have remembered their responses to the pre-manipulation measure and tried to match it to the post-manipulation measure.

Future Directions

Firstly, future research can consider investigating the underlying mechanisms of the effects found in this study. One way to do this would be to include mediators such as relationship uncertainty to explain the effects. As mentioned in the literature review, both gift cost and SN

approval have been found to affect relationship uncertainty; high gift cost and SN approval reduce uncertainty, whereas low gift cost and SN disapproval increase uncertainty. Apart from investigating the underlying mechanisms, boundary conditions can also be considered. Since this study was conducted exclusively in Singapore, which is a Southeast Asian country, it is possible that culture is a boundary condition of the effects found (e.g., gift cost may be more related to relationship satisfaction in Eastern versus Western countries). Thus, it would be useful to replicate this study in other cultures to determine whether the results are generalizable.

Secondly, in this study, the components of overall gift cost (i.e., monetary cost and psychic cost) were not dissociated from each other to investigate their separate effects. Future research can consider doing so because it is possible that one type of cost may influence perceived commitment more than the other type. Based on the participants' open-ended responses, there were some participants who mentioned it was not the low amount of money spent that bothered them; it was the lack of effort put into the gift. This may hint at a possible effect whereby psychic cost influences perceived partner commitment more than monetary cost does. It is also possible that relationship satisfaction could moderate the effects of monetary cost and psychic cost differently.

Another future direction would be to investigate gift giving beyond the context of romantic relationships. Studies could explore gift giving between family members, friends, colleagues, and/or acquaintances. Even the types of SN members could be expanded to include acquaintances and strangers. This would be highly relevant to the present-day context of social media because many social media users have a tendency to post online about the gifts they receive from others. Furthermore, their social media contacts could include acquaintances they barely meet, or strangers whom they do not know, in addition to their family members and

friends. This provides the opportunity for gift receivers to receive comments (i.e., SN approval) from acquaintances and strangers which would not have been common practice before the emergence of social media. Hence, a study investigating the effects of SN approval on relationship perceptions with an expanded definition of *SN members* would be highly relevant and maybe even beneficial at this time.

Conclusion

This paper began with the question, "Is it only the thought that counts; or do gift cost, social approval, and relationship satisfaction matter too?". The results from the empirical study provided the initial evidence that these three factors do matter in the context of romantic gift giving, but much more can be done to continue exploring these effects. I hope this paper provides the impetus for other researchers to continue exploring this phenomenon in their own creative ways.

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Appendix A

Gift cost manipulation

We are exploring how people assess the relative cost of gifts they receive in terms of money, time and effort. On the next page, you will be asked to read a scenario. Please imagine yourself in this scenario and allow yourself to experience the emotions you would feel in response to the situation. Once you have read the provided information, you will be asked to rate the cost of the gift in terms of the money spent, the time and effort spent, as well as both these factors combined. Please take your time to carefully internalise the information in the scenario before you proceed to answer the questions.

Gift cost manipulation check (after gift cost vignette)

For the following questions, based on the scenario you have just read, please rate your responses on the scale shown (1 = *extremely low amount*; 7 = *extremely high amount*):

- How much money do you think <partner's name> spent on the gift?
- How much time and effort do you think <partner's name> spent on the gift?
- How would you rate the overall cost of the gift, in terms of money, time and effort?

Gift cost manipulation distractor questions

- If you had to make a guess, what do you think <partner's name> got you as an anniversary gift? Explain why you think so in a few sentences.
- How do you feel about receiving such a gift for your anniversary?

Appendix B

Social network approval manipulation

Please list down three of your closest family members and/or friends who know about your relationship. You may list down names which you would use to refer to the person (e.g. Mom/Mama):

- Family/Friend #1: _____
- Family/Friend #2: _____
- Family/Friend #3: _____

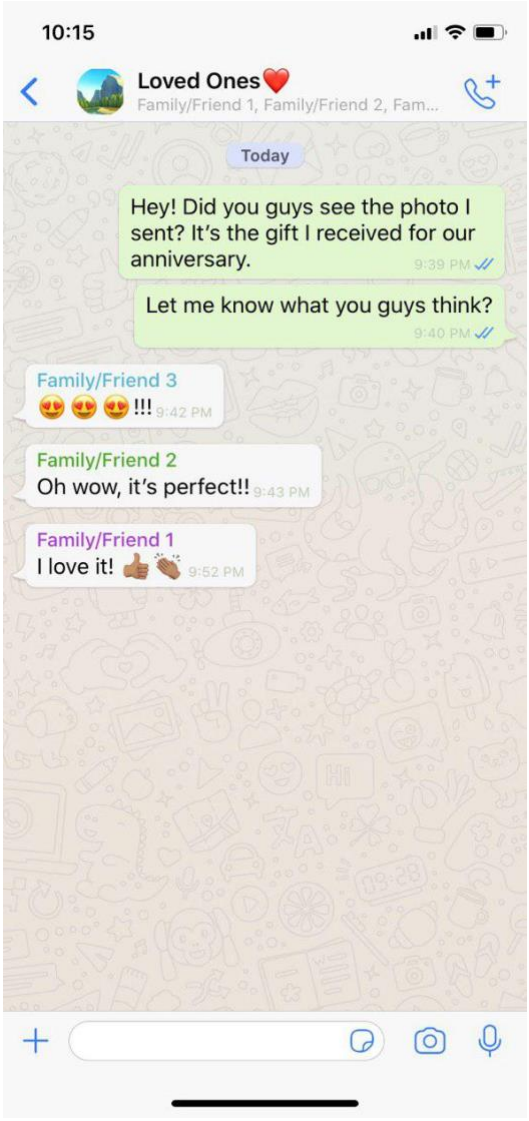
Out of these 3 names you have listed, please list down the number of family members and number of friends:

- Family Members: ___
- Friends: ___

After receiving the anniversary gift from <partner's name> in the earlier scenario, you decided to share a photo of it with <family/friend #1's name>, <family/friend #2's name>, and <family/friend #3's name>, and they responded with some comments.

On the next page, you will see a screenshot of your conversation with the three of them in a group chat. Please imagine yourself in this scenario and the feelings that you would have. Once you are ready, please click "Next".

Social Network Approval:



Social Network Disapproval:

Social network approval manipulation check question

To continue, please choose a statement which best describes the screenshot you just saw:

- They mostly approved of the gift
- They mostly disapproved of the gift

Social network approval distractor question

Why do you think your family members and/or friends reacted that way? Explain in a few sentences.

Appendix C

Relationship satisfaction measure

(1 = *extremely dissatisfied;* 7 = *extremely satisfied)*

- How satisfied are you with your current romantic relationship?
- How satisfied are you with your relationship with <partner's name>?
- How satisfied are you with <partner's name> as a partner?

Appendix D

Perceived partner commitment measure

- Based on the current situation, how committed does <partner's name> seem to be to your relationship? (1= *extremely uncommitted*; 7 = *extremely committed)*
- Based on the current situation, how likely is <partner's name> to continue this relationship for the long term? (1= *extremely unlikely*; 7 = *extremely likely)*

Appendix E

Own relationship commitment measure

- Based on the current situation, how likely are <u>you</u> to continue this relationship for the long term? (1= *extremely unlikely*; 7 = *extremely likely)*