

An Evolutionary Psychology Perspective on Gift Giving among Young Adults

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ABSTRACT

With evolutionary psychology used as the theoretical framework, two aspects of gift giving among young adults are investigated: (a) sex differences in motives for giving gifts to a romantic partner, and (b) the allocation of gift expenditures among various relations, including romantic partners, close friends, close kin, and distant kin members. As per the evolved sex differences in mating strategies, it is proposed and found that men report tactical motives for giving gifts to their romantic partners more frequently than women. Also, there are no sex differences in situational motives for giving gifts. In addition, women are aware that men use tactical motives more often; whereas men think that these motives are employed equally by both sexes. With regard to gift expenditures it is found that, for kin members, the amount spent on gifts increases with the genetic relatedness (r value) of the particular kin. When all relations (kin and nonkin members) are included, the allocation of gift expenditures were the highest to romantic partners, followed by those to close kin members and then to close friends. The latter finding is explained via the importance attached to the evolved psychological mechanisms linked to each of the above relations, namely, reproductive fitness (for partners), nonreproductive fitness (for close kin members), and reciprocal altruism (for close friends).
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Of all consumption rituals, one of the most prevalent and fascinating is that of gift giving. In light of its obvious economic importance, it is a ritual replete with practical implications. On the other hand, its theoretical implications are numerous, as evidenced by the number of disciplines within the social sciences that have explored the process, including those in anthropology, sociology, economics, and marketing (Otnes & Beltramini, 1996). That being said, anthropologists have traditionally been the most frequent contributors to the literature. Given that 20th-century American anthropology has been dominated by the cultural-relativism movement (Brown, 1991), it is not surprising that such scholars sought to catalogue cross-cultural differences rather than to investigate the underlying commonalities within that behavior across cultures. Such a theoretical stance (i.e., cultural relativism) might suggest that gift giving is not within the purview of evolutionary psychology (EP), given that the latter framework typically seeks behaviors that are invariant across cultures.

How then might gift giving fit within an EP framework? Tooby and Cosmides (1992) have espoused an interactionist view of the world, namely, that behavior is a product of an interaction between evolved psychological mechanisms and the environment. Viewed in this light, the act of gift giving is a universal phenomenon (i.e., due to one or more evolved psychological mechanisms or Darwinian modules), with its specific rules and rituals varying across cultures (i.e., the particular practices are environment specific). Among the several domain-specific mechanisms or modules identified by evolutionary psychologists, those of kin altruism (Hamilton, 1964), reciprocal altruism (Trivers, 1971) and mate selection (Trivers, 1972) are most relevant in the context of gift giving. It is a contention that gift giving could have evolved as an adaptive mechanism in one of these domains and later extended to the other two domains. For instance, gift giving could have evolved from the adaptive benefits of food sharing (i.e., an instance of reciprocal altruism) and later extended to the domain of mate selection in the form of a male courtship strategy. The current article discusses the adaptive significance of gift giving in various domains, and specifically in the context of human mating. Young adults are used as the sample. Because young adults are in a primary mate-seeking stage, their use as the sample is appropriate in this context.

The scope of the current article is twofold: (a) to investigate sex differences in the motives for offering a gift to a romantic partner; and (b) to explore how individuals allocate their gift-giving budgets to those closest to them, that is, romantic partners, close friends, and family members. In addressing both research objectives, EP will be used as the explicative framework. Though, any altruistic behavior, for example, "making dinner for your partner," "helping a friend with his chores," could be considered as a gift, the sole focus here is on material gifts, that is, those purchased with an intention of being offered to another

individual. The latter aspect keeps the focus on a domain of most interest to marketers: How and why do consumers spend their money on gifts.

GIFT GIVING

Some of the early research in gift giving proposed conceptual models of the process, by delineating its distinct stages (cf. Banks, 1979; Belk, 1976, 1979; Sherry, 1983). Other theorists sought to identify motives for offering gifts, such as, to reinforce highly valued relationships that are insecure (Caplow, 1982), to conform to a sense of obligation (e.g., Cheal, 1987, 1988) and to ingratiate one's self with the gift recipient (Belk, 1988). Researchers have also proposed taxonomies for categorizing gift-giving motives, including Sherry's (1983) altruistic versus agnostic motives; the Goodwin, Smith, and Spiggle (1990) voluntary (self-serving or selfless) versus obligatory (reciprocity and rituals dichotomy) motives; and Wolfinbarger's (1990) groupings of motives, including altruism, compliance with social norms (e.g., occasions such as birthdays, Christmas, Mother's Day), and self-interest (e.g., to display one's wealth and status, such as when publicly offering a donation).

Much of the literature investigating sex differences in gift-giving finds that women are more involved in the gift-giving process. Women offered more gifts than they received (Caplow, 1982; Fischer & Arnold, 1990), they paid more on average (Rucker et al., 1991), and were more satisfied with their gift selection (Fischer & Arnold, 1990). Perhaps, the best synopsis of the latter literature is the Sherry and McGrath (1989) finding wherein gift giving was referred to as "work of women" (p. 162). However, these findings have been confined to contexts other than romantic relationships (such as gift giving during Christmas). In a romantic relationship it has been found that it is men and not women that play a greater role in gift giving in the context of courtship.

GIFT GIVING IN ROMANTIC RELATIONSHIPS

Belk and Coon (1993) categorized gift exchanges between romantic partners as one of three types: as an economic exchange, as a social exchange, or as an expression of agapic (selfless) love. Through a qualitative analysis of dating experiences, as recorded in subject diaries, Belk and Coon found that as per the economic exchange paradigm gifts were viewed as an investment. Men viewed gifts as a means of gaining sexual favors and women viewed them as a sexual debt. When seen as a social exchange, the gift serves to establish, strengthen, and maintain social relationships, and acts as a symbol of commitment. When offered as an expression of agapic love, a gift is a means by which the relationship is

celebrated and the gift has a purely expressive value. In contrast to the economic and social exchange paradigms, which entail instrumental motives, the agapic love paradigm suggests purely altruistic motives. The authors conclude that women are more likely to treasure gifts received for their expressive or symbolic value, while men on the other hand do so for their utilitarian value.

Among other studies that have looked at gift giving in romantic relationships, McGrath (1995) explored the use of gifts as a courtship signal, and concluded that: "The use of this device by males is accepted and understood within courtship behavior. Females, on the other hand, do not appear to have a comparable set of gift signals to express their willingness to participate in a romantic relationship" (p. 389). A similar view has been espoused by Areni, Kiecker, and Palan (1998) and Huang and Yu (2000). A synopsis of the latter literature reveals two key trends: (a) Men are more likely than women to use gifts as part of the courtship ritual; (b) in not a single case was a Darwinian account used as the explicative framework in understanding such sex differences. For example, Areni et al. (1998) argued that because men find it difficult to express their emotions verbally, they are more likely to adopt an instrumental role as gift givers. The latter explanation relies on the socialization-based account that males are taught to be agentic (i.e., instrumental) and aggressive from early childhood (cf. Eagly, 1987), whereas women are socialized to be communal. Evolutionary psychology (EP), on the other hand, posits ultimate explanations, or why these distinct socialization patterns emerged. As per the EP account, the two sexes have evolved distinct psychological mechanisms and predispositions that maximize their fitness (i.e., reproductive success), and socialization patterns emerge to enhance the fitness interests of the respective sexes (Archer, 1996).

GIFT GIVING FROM AN EVOLUTIONARY PSYCHOLOGY PERSPECTIVE

Sex Differences in Mating Strategies and Motives for Giving Gifts to Romantic Partners

Although EP has thus far been used to explain numerous behaviors (cf. Barkow, Cosmides, & Tooby, 1992), its most frequent application has been to explain various facets of human mating. For example, evolutionary psychologists have proposed and found that there is cross-cultural similarity in the characteristics sought by men and women in their respective mates (Buss, 1994; Singh, 1993). Men prefer young and attractive women, whereas women prefer men that not only own resources but also are willing to share them. Not surprisingly, each sex is well aware of the preferences sought by the other party and will ac-

cordingly use the appropriate tactics for attraction and retention of mates, and for derogation of competitors (Greenlees & McGrew, 1994; Hirsch & Paul, 1996; Schmitt & Buss, 1996). Another important element in understanding human courtship is to explore its temporal context. Several evolutionists have identified key sex differences in the proclivity of each sex for participating in short-term versus long-term mating. Trivers' (1972) theory of parental investment proposes that whichever sex bears the greater costs of parenting will be sexually more restrained and selective. Clearly, in the human species, women's parenting costs are greater, since the minimal parenting cost for them is a nine-month gestation period versus a single act of sexual intercourse for men. Hence, it has been found that men are typically more keen on short-term mating, be it due to their lower parenting costs and/or given the reproductive benefits that they can reap from such a mating strategy (Buss & Schmitt, 1993; Kenrick, Sadalla, Groth, & Trost, 1990; Symons, 1979; Trivers, 1972).

In the current context, because of men's greater proclivity for short-term mating coupled with women's preference for generous men with resources, it is proposed that gift giving could have evolved as a distinctly male courtship strategy. The field of ethology is replete with examples wherein courtship involves males offering gifts to their prospective mates (cf. Batten, 1992). For instance, the use of food in exchange for sexual access is common among baboons, our nearest cousins in the ape family (cf. Hawkes, 1991; Ridley, 1997). The latter courtship strategy could have also been an extension of evolved co-operative behavior (as in food sharing) as per the reciprocal altruism paradigm (Trivers, 1971). Irrespective of its origins, it is argued that there exist innate differences in the manner in which each sex engages in and interprets the act of gift giving in the context of mating. These differences should be embodied in the motives that each sex attaches to the act.

Because it is argued that gift giving could have evolved as a distinctly male courtship strategy, men are much more likely to be tactical in their reasons for offering a gift to a romantic partner. In other words, men, more frequently than women, will have tactical or instrumental (i.e., purposive or to achieve a goal) motives for engaging in this behavior, be it to flaunt their resources, to display their generosity, or as a prelude to seduction. The latter motives accord with the economic exchange paradigm of Belk and Coon (1993), wherein they found that men believe that gifts can be exchanged for sexual favors, and that men stop offering gifts once their date is "won" (i.e., the woman confesses her love). On the other hand, according to Belk and Coon, women view the act of gift giving as an expression of agapic love (i.e., void of tactical motives). Caplow (1982) found that although women gave equally to both men and women, men offered gifts predominantly to women. More recently, Saad and Gill (2001a; 2001b) showed that in the context of two nonco-operative game situations (the dictator and ultimatum games), men in

each instance provided more generous offers when facing women. Finally, Rucker et al. (1991) found that men placed greater importance on the price of a gift to be offered, whereas women were more concerned with whether their partners liked the gift. The latter three studies provide evidence that men, more so than women, might view gifts as resources and use them to signal an interest or willingness to invest in the opposite sex. It is important to reiterate the fact that being more tactical should not be construed as synonymous with being deceitful. Although it is undoubtedly true that men will oftentimes use gift giving for duplicitous purposes (e.g., to feign commitment), it is also a manner by which men signal a genuine long-term or short-term interest in a potential mate or reaffirm an existing bond with an existing partner. Thus, it is proposed that

H1: Men, more so than women, will report a greater frequency of tactical (i.e., instrumental) reasons for offering gifts to their romantic partners.

From an evolutionary perspective, evolved motivational systems direct behavior toward the goal of inclusive fitness maximization (i.e., the reproductive success of the individuals or their genetically related kin). Thus, all motives or predispositions should evolve to be tactical or instrumental in achieving this goal. From this standpoint, women's motives for gift giving could not be agapic, that is, void of any tactical reasons. It might be that women merely state their motives to be agapic and are unaware of the underlying fitness goals served by these motives. For instance, given that women are more selective in mate choice, the feeling of agapic motives might be a means to ensure that women believe they have chosen the right mate. Such self-deception has commonly been identified as a mechanism that facilitates adaptive behavior in social domains (cf. Trivers, 1985). Thus, the latter agapic motives might have been selected for in females as a sign of genuine long-term interest in their male partners.

There exist other situational reasons that an individual will offer a gift to a romantic partner, (e.g., to celebrate a birthday). In those instances, the tactical motives are less likely to be operative, as the motivation for gift giving is mainly external, triggered by external factors such as social norms. It is contended that although tactical motives originate from internal factors (such as the need to attract mates), situational motives are triggered by external factors (such as social norms: Christmas, birthdays, or idiosyncratic social contexts, e.g., a fight with a partner, to reciprocate a partner's gift). Even though all acts of gift giving are subject to both these influences, internal factors are considered as the dominant antecedent to tactical motives and external factors as the dominant influence for situational motives. Thus, it is posited that:

H2: Both sexes will report an equal frequency of situational reasons for offering a gift to one's romantic partner.

Allocation of Gift Expenditures Among Kin and Nonkin Relations

At the root of Darwinian thinking is the tenet that an organism's ultimate goal is to propagate its genes. As such, reproductive success in a Darwinian sense, strictly refers to the number of offspring that a particular individual has had. Hamilton (1964) extended this concept by introducing the idea of inclusive fitness, namely, reproductive success is achieved not only by the number of one's own offspring but also by those of one's kin group. As such, a newborn increases the inclusive fitness of not only his or her parents but also those of his or her genetically related kin. This theory has been used extensively to explain altruistic behaviors toward kin members, behaviors that are otherwise suboptimal in a solely Darwinian fitness sense. For example, Burnstein, Crandall, and Kitayama (1994) showed that acts of altruism among humans are well predicted by inclusive fitness concerns, especially in the case of life-threatening circumstances. In the context of gift giving, both Belk (1979) and Caplow (1982) found that the frequency of multiple gifts was inversely related to kinship distance, and gifts to kin members were of greater value than gifts to nonkin members. All other things equal, a Darwinian account would suggest that the allocation of gift expenditures amongst relatives should be a function of genetic relatedness. As such, an individual's inclusive fitness is maximized by behaving more altruistically towards one's (genetically) close kin rather than distant ones. Thus, it is propose that:

H3: The amount spent on a gift (to relatives) will be positively related to the genetic relatedness between givers and recipients.

METHOD

Participants

A survey investigating various facets of gift-giving behavior was administered to 93 undergraduate students (48 men and 45 women) in a classroom setting, at an eastern Canadian university.

Materials and Procedure

The survey consisted of 18 questions (many of which were fillers), three of which were relevant to the current study. To investigate the motives for offering a gift to a romantic partner, respondents were provided with

a list of motives and were asked the following question: "How often have each of the ensuing reasons been an important cause for you giving a gift to your partner?" The responses were taken on a five-item frequency scale consisting of "never," "rarely," "sometimes," "often," and "always" (coded from 1 to 5). The reasons listed in the survey were generated via a brainstorming session between the two authors. These reasons were classified as either *tactical motives* (i.e., those arising from internal factors) or *situational motives* (those triggered primarily by external factors). The tactical motives were "displaying financial resources," "creating a good impression," "as a means of seduction," "showing affection," "displaying long-term interest," and "displaying generosity." The situational motives were "occasion demanded it (e.g., birthday)," "reconciliation after a fight," and "to reciprocate."

As per Wolfenbarger's (1990) concept of "symbolic interactionism," the gift giver is communicating with the gift recipient via the signals implied by the gift. As such, for a complete understanding of the gift-giving courtship ritual, one must not only address the giver's reasons for offering the gifts but also the ability of the recipient to accurately decode and interpret these motives. Accordingly, the current work also explored the abilities of both sexes in accurately decoding these messages. To investigate whether respondents held accurate perceptions of the reasons that their partners offered them gifts, they were asked: "To the best of your knowledge, how often do you think have each of the ensuing reasons been an important cause behind your partner offering you a gift?" The reasons were the same as used above for the respondents' own motives, that is, situational and tactical motives, and the responses were taken on the same five-item frequency scale consisting of "never," "rarely," "sometimes," "often," and "always."

To address the second research objective, respondents were shown an exhaustive list of potential gift recipients and were asked to ". . . please provide an estimate of the money that you intend to spend on the next gift to that person. Enter 'N/A' for 'not applicable' if the listed individual does not exist in your case (e.g., you do not have a stepbrother). If the person does exist but you do not plan on giving him/her a gift, enter '0.'" The list of potential gift recipients included both kin and nonkin members. For the former, the list spanned the range of genetic relatedness, as measured by r , the percentage of genes shared by two individuals (cf. Burnstein et al., 1994 for a more detailed description of r). Kin members with an r value of 0.50 were mother, father, older sister, younger sister, older brother, and younger brother. Those with an r value of 0.25 were aunt, uncle, niece, nephew, grandmother, grandfather, half-brother, and half-sister. The sole kin member with an r value of 0.125 that was included in the list was closest first cousin. Nonkin members in the list consisted of stepmother, stepfather, stepbrother, stepsister, closest friend, and romantic partner. Finally, re-

spondents were provided with an open-ended option for other possible gift recipients not included in the list.

RESULTS

The data from the first part of the study were analyzed with the use of one-tailed *t* tests that compared the mean frequencies reported by males and females for each of the motives. The sex differences in the motives were interpreted with the use of both significance values (i.e., *p* values for the *t* test) and effect sizes (as measured by Cohen's *d*). As seen in Table 1, the reported frequency scores for five out of the six tactical motives, namely, "displaying financial resources," "creating a good impression," "as a means of seduction," "showing affection," and "displaying long-term interest," were significantly greater for men as compared to women. As per Cohen's (1987) criteria, a large effect size (i.e., greater than 0.8) was obtained for the tactical motive "creating a good impression" ($d = 0.84$), and a moderate effect size (approximately between 0.5 and 0.8) for the motives "displaying financial resources" ($d = .49$), "as a means of seduction" ($d = .46$), "showing affection" ($d = .54$), and "displaying long-term interest" ($d = .46$). These results support H1—that men, more often than women, have tactical motives when offering gifts to their romantic partners. The sole tactical motive that did not yield a statistically significant difference was "displaying generosity," albeit the means were in the predicted direction. Furthermore, in support of the second hypothesis H2, it was found that men and women did not differ in their reported frequency scores for the three situational motives.

Table 2 reports the findings of both sexes regarding their perceptions

Table 1. Motives for Gift Giving by Sex.

Motives for Giving Gifts	Men (<i>n</i> = 44)		Women (<i>n</i> = 41)		<i>p</i> -value	Effect Size (<i>d</i>)
	Mean	<i>SD</i>	Mean	<i>SD</i>		
Tactical motives						
Displaying financial resources	1.64	1.01	1.24	0.58	.016	0.49
Creating a good impression	3.00	1.18	2.05	1.07	.000	0.84
As a means of seduction	2.65	1.23	2.12	1.05	.019	0.46
Showing affection	4.09	0.74	3.63	0.94	.007	0.54
Displaying long-term interest	2.91	1.16	2.37	1.20	.018	0.46
Displaying generosity	2.82	1.21	2.71	1.31	.342	0.09
Situational motives						
Occasion demanded it	4.28	0.80	4.37	1.04	.334	0.10
Reconciliation after a fight	2.11	1.02	2.05	0.97	.382	0.06
To reciprocate	2.58	1.12	2.49	1.21	.356	0.08

Table 2. Motives for Gift Giving by Sex: Self versus Partner's Motives.

Motives for Giving Gifts	Men (<i>n</i> = 44)					Women (<i>n</i> = 41)				
	Self	Partner's		<i>p</i> -value	Effect Size	Self	Partner's		<i>p</i> -value	Effect Size
	Mean	Mean	<i>SD</i>			Mean	Mean	<i>SD</i>		
Tactical motives										
Displaying financial resources	1.64	1.67	0.94	.430	0.03	1.24	1.83	1.11	.002	0.67
Creating a good impression	3.00	2.79	1.17	.205	0.18	2.05	2.75	1.30	.005	0.59
As a means of seduction	2.65	2.33	1.25	.115	0.26	2.12	2.50	1.04	.055	0.36
Showing affection	4.09	4.16	0.75	.330	0.09	3.63	4.00	0.93	.041	0.40
Displaying long-term interest	2.91	3.37	1.15	.032	0.40	2.37	3.00	1.40	.016	0.48
Displaying generosity	2.82	3.12	1.31	.135	0.24	2.71	3.02	1.27	.135	0.24
Situational motives										
Occasion demanded it	4.28	4.26	0.79	.445	0.03	4.37	4.23	0.96	.275	0.14
Reconciliation after a fight	2.11	1.93	0.97	.195	0.18	2.05	2.38	1.31	.100	0.29
To reciprocate	2.58	2.55	1.11	.445	0.03	2.49	2.32	1.21	.275	0.14

of the reasons that their partners offer them gifts. These findings pertain to the respondents' decoding of their partner's motives. As is evident from Table 2, men think that they receive gifts from their romantic partners for the same reasons that they give gifts (except in the case of "displaying long-term interest"). Women on the other hand, realize that men, more often than women, have tactical motives when offering gifts to their romantic partners (except in the case of "displaying generosity").

For the second part of the study the gift recipients were grouped into seven categories, namely, (a) close kin members with an r (a measure of genetic relatedness in percentage of shared genes) = 0.50; (b) moderately close kin members with an $r = 0.25$; (c) distant kin members with an $r = 0.125$; (d) stepfamily (stepparents and stepsiblings) with an $r = 0.00$; (e) romantic partner; (f) closest friend; (g) others (these included pets, teacher, boyfriend's parents and "kids that I baby sit for"). The data were analyzed by comparing the mean amount of money spent within each category. Given that sex differences were identified earlier, it was felt that it would be prudent to test for such differences here (see Table 3). Not only did men and women not differ on any of the seven categories, but also no difference was obtained when the categories were aggregated. Thus, the total amount of money spent and whom it was spent on was not moderated by one's sex. As such, sex was dropped as a variable in the remaining analyses. The mean gift expenditures in each of the above seven categories was calculated by taking a weighted average of the expenditures in each of the subgroups within a particular category. For instance, the expenditure on close kin ($r = 0.50$) was the weighted average of the expenditures on mother, father, older sister, older brother, younger sister, and younger brother. The resulting mean expenditures within each of the seven categories were romantic partner (\$106.43), close kin with $r = 0.50$ (\$73.12), closest friend (\$46.34), stepfamily (\$19.37), moderately close kin with $r = 0.25$ (\$19.03), distant kin with $r = 0.125$ (\$18.56), and others (\$27.03). A Bonferroni multiple comparisons of these means revealed that the expenditures on romantic partner were the highest; those on close kin were the next highest; followed by those on closest friend; and, this expenditure (on closest friend) was higher than those on moderately close kin and distant kin, but not statistically different from those on "others" and stepfamily (due to small sample sizes in the latter two groups). The expenditures on moderately close kin, distant kin, stepfamily and others did not differ from each other (refer to Table 4 for the detailed statistics for the comparisons of gift expenditures between all pairs of relations). H3 stipulated that the expenditure on a gift given to kin members should be positively related to the genetic relatedness between the giver and the recipient. The above results provide partial support for this hypothesis, namely, although the expenditures on kin members with an $r = 0.50$ were higher than those on the other two kin groups (i.e., kin members with r values

Table 3. Gift Expenditures (in \$) as a Function of Type of Relationship.

Relation	<i>r</i> Value	<i>r</i> Perceived	Mean Gift Expenditures in \$ (<i>n</i> per cell)	Mean Gift Expenditures in \$ (by sex)	
				Males	Females
Partner	–	–	106.43 (70)	102.1	111.0
Close kin	0.5	95	73.12	74.5	71.5
Mother	0.5		82.34 (92)	79.7	85.2
Father	0.5		74.89 (90)	74.3	75.6
Older sister	0.5		66.09 (32)	65.3	67.3
Older brother	0.5		82.11 (26)	96.0	50.6
Younger sister	0.5		56.82 (28)	60.4	52.7
Younger brother	0.5		58.42 (38)	62.5	53.9
Friend	–	–	46.34 (93)	37.8	55.4
Mod-close kin	0.25	65	19.03	16.2	22.2
Grandmother	0.25		28.36 (80)	26.5	30.1
Grandfather	0.25		27.27 (56)	29.4	25.2
Uncle	0.25		10.10 (86)	8.3	12.0
Aunt	0.25		14.60 (83)	9.2	20.4
Niece	0.25		11.21 (29)	11.5	10.6
Nephew	0.25		22.27 (22)	10.8	38.9
Half-sister	0.25		27.50 (6)	25.0	32.5
Half-brother	0.25		35.00 (2)	30.0	40.0
Distant kin (closest first cousin)	0.125	55	18.56 (77)	14.9	22.4
Stepfamily	0	45	19.37	27.8	14.0
Stepmother	0		21.60 (10)	30.0	16.0
Stepfather	0		17.50 (4)	30.0	13.3
Stepsister	0		18.67 (6)	23.3	14.0
Stepbrother	0		15.83 (3)	30.0	8.75
Other	–	–	27.03 (16)	34.6	21.1
Total			466.30	460.0	473.0

Table 4. Comparison of Gift Expenditures on Different Relations.

Relation	Mean Gift-Expenditures in \$ (Number of Observations)	Bonferroni Comparison with Relation <i>p</i> -value (effect size)						
		Partner	Close Kin	Closest Friend	Mod-Close Kin	Distant Kin (Closest 1st Cousin)	Stepfamily	Other
Partner	106.43 (70)	–	0.00 (0.40)	0.00 (0.75)	0.00 (1.16)	0.00 (1.20)	0.00 (1.18)	0.00 (1.07)
Close kin	73.12 (306)		–	0.00 (0.49)	0.00 (1.12)	0.00 (1.21)	0.00 (1.19)	0.01 (1.00)
Closest friend	46.34 (93)			–	0.00 (0.64)	0.01 (0.71)	0.51 (0.69)	1.00 (0.48)
Mode-close kin	19.03 (364)				–	1.00 (0.02)	1.00 (0.01)	1.00 (0.27)
Distant kin (Closest 1 st cousin)	18.56 (77)					–	1.00 (0.03)	1.00 (0.34)
Stepfamily	19.37 (23)						–	1.00 (0.31)
Other	27.03 (16)							–

of 0.25 or 0.125), the average expenditures on gifts to those in the latter two groups did not differ from each other.

A correlation analysis was also performed between the gift expenditures and the relatedness of the various relations between whom the gifts were to be offered. The latter analyses were performed with the use of both genetic relatedness (r) and perceived relatedness (r perceived) of the various relations. The measure for r perceived and the reported values for various relations were adopted from Burnstein, Crandall, and Kitayama (1994, p. 776, Figure 1). In the latter study, r perceived was measured on an interval scale wherein participants are required to report "How closely related do you perceive yourself to be to your (relation, e.g., sister)?" by mentioning a number between 0 (completely unrelated) to 100 (extremely closely related). The correlation analysis revealed a significant positive relationship between gift expenditures and r value ($r = 0.48, p < .00$), and between gift expenditures and perceived relatedness (r perceived) of the different relationships ($r = 0.49, p < .00$). Thus, the latter analyses provided a strong support for H3.

The above two analyses (i.e., the ANOVA and regressions) were performed across subjects. That is, the data on gift expenditures was averaged across subjects and was then subjected to the relevant analyses. Given H3, it was felt worthwhile to determine whether the correlation results would replicate if the data were analyzed within subjects. Four within-subjects measures for gift expenditures were defined: (a) the amount spent on each gift recipient was expressed as a proportion of the total amount spent; the amount spent on each gift recipient was expressed as a ratio of that spent on (b) romantic partner; (c) mother; or (d) closest friend. Separate simple correlations were run with each of these four measures with either r value or r perceived as the other variable. The results for both sets of correlations were concordant with those obtained with the use of the across-subjects data. When r value was used as the variable, the correlations ranged from 0.39 to 0.64 (all significant at $p < .00$), whereas when r perceived was used as the other variable, the correlations ranged from 0.41 to 0.67 (all significant at $p < .00$). These analyses, performed on a within-subjects basis, establish the robustness of the support found for H3, namely, that gift expenditures are positively related to the extent of genetic relatedness between the giver and the recipient.

GENERAL DISCUSSION

Sex Differences in the Motives for Offering Gifts to Romantic Partners

With the use of the EP framework, it was predicted and found that men, more often than women, reported having tactical motives for giving gifts

to their romantic partners. This prediction was based on the premise that gift giving could have evolved as a distinctly male courtship strategy for attracting and retaining mates. It is consistent with the finding that males are known to employ resources (e.g., gifts) both to gain short-term access to mates and to signal long-term mating interest (Schmitt & Buss, 1996). In contrast, as stipulated in H2, no differences were found along the situational motives, namely, those triggered by external factors. Clearly, in those instances, the act of gift giving is driven by the need to comply to social norms or to retain equilibrium in relations imbalanced by specific events.

Perhaps most telling of the evolved psychological mechanisms inherent in gift giving during courtship was the finding that although women are perfectly aware of the reasons that men offer them gifts, men are grossly inaccurate in their perceptions. Men are seldom courted using gift giving as a tactic. As such, a proximate explanation would propose that they have not learned how to read the signals in this type of gift-giving exchange. EP, with its panoply of ultimate explanations, would suggest that if a man were to make a wrong inference regarding a potential partner's motives, it poses little or no genetic costs to him. If anything, a man that is misled into mating with a woman, has potentially increased his inclusive fitness. Clearly, the same is not true for women. If a woman were to mate with each suitor that offered her a gift, she would in part lose control of her genetic destiny and might accordingly be choosing suboptimal mates or those interested solely in short-term mating. As such, natural selection would have selected for men that could be duplicitous when seeking mating opportunities and accordingly would have endowed women with a capacity to detect such misguided mating attempts.

There were two surprising findings in Tables 1 and 2. First, the sole tactical motive that did not produce a difference between the two sexes was "displaying generosity." The two sexes did not differ in the amount of money spent on their romantic partners. Thus, it appears that although the motives for gift giving are different for both sexes, once they engage in the behavior, they do so to the same extent. Women often state using gift giving as a means to celebrate the relationship, and indicate agamic motives for such acts, which were not explored in the current research. Moreover, it might be that although men demonstrate their generosity earlier in the relationship, women might do so further along in it. The second surprising finding was that men felt that women offered gifts more frequently than they did, as a means of "displaying long-term interest." Once again, the temporal context of the relationship might shed light on this otherwise unexpected finding. Men are likely to use gift giving as a means of "displaying long-term interest" early in the relationship. On the other hand, to the extent that women offer gifts it will occur more frequently later in the relationship, and hence, by definition, the gift is likely to solidify an ongoing long-term commitment.

This fact has undoubtedly not gone unnoticed by men, thus resulting in their perceptions that a gift offering serves as a signal of long-term commitment.

The conventional social role theory perspective would argue that all of the latter findings are due to socialization; that men and women are differentially socialized to acquire “agentic/instrumental” and “communal” traits, respectively (Eagly, 1987). Thus, in this perspective, because men are socialized to be instrumental, they remain so in their motives when offering gifts. However, this theory does not provide an ultimate explanation as to why the socialization process is such and why it exists across cultures. Several scholars have proposed cogent arguments for the superiority of EP over social role theory in explaining sex differences in behavior (e.g., Archer, 1996; Buss, 1996). The theoretical stance of the present authors is well aligned with the interactionist framework, as championed by Tooby and Cosmides (1992); namely, that behavior can neither be fully and adequately explained solely by innate dispositions nor solely by socialization processes. Instead, any behavior is an interaction of both sets of causes.

Allocation of One’s Gift-Giving Budget

It was found that gift expenditures were positively correlated to the genetic relatedness between givers and recipients. Perhaps of greater interest is the ordinal ranking of the various categories of recipients in terms of gift expenditures. It was found that the largest expenditures were to one’s romantic partner, followed by those to close family members, then those to one’s closest friend, and finally those to more distant family and stepfamily members. Furthermore, it was proposed that who the intended gift recipient is, will determine which evolved psychological mechanism is operative, be it Darwinian fitness (i.e., gifts to a romantic partner), nonreproductive fitness (i.e., gifts to kin members), or reciprocal altruism (i.e., gifts to nonkin members). Based on the three largest means of gift expenditures, this would imply in the current context (i.e., among young men and women) that reproductive fitness is most important, followed by nonreproductive fitness (solely vis-à-vis one’s closest genetic relatives), and finally reciprocal altruism. This is probably the case among young adults (i.e., undergraduate students in this study), who are in the primary mate-seeking period. The pattern is likely to change in different life stages, for example, among the prepubescent population, nonreproductive fitness is clearly a more important concern, although at a subconscious level.

In addition to addressing the two key research objectives, the present study also explored, albeit in a post hoc manner, other evolutionary mechanisms with a potential link to these findings. The first mechanism, as proposed by Daly and Wilson (1988), provides a Darwinian account for the finding that the likelihood of a child being abused was

much greater if there was a stepparent in the household. It was found that the average gift expenditures spent on stepparents were much lower than those spent on biological parents (\$20.43 vs. \$78.64, $p < .00$, $d = 1.28$), with the same holding true when comparing stepsiblings to biological siblings (\$17.72 vs. \$65.01, $p < .20$, $d = 1.07$). These findings complement those of Daly and Wilson (1988), in that even the extent of altruism differs between step and biological relationships. The second mechanism relates to the ability of individuals to detect cheaters in a social contract (Cosmides & Tooby, 1992). The present finding that women were better able to decode the tactical motives of their potential suitors might suggest a sex difference in cheater detection during the courtship ritual. This ability has more adaptive significance to women as compared to men, given their higher fitness costs in choosing the wrong mate, and thus suggests that, perhaps, women have a superior ability to detect cheaters in human courtship.

LIMITATIONS AND FUTURE RESEARCH

Given that this is a survey-based study, its link to actual consumption, especially with respect to gift expenditures, is only assumed. In addition only undergraduate students are used in this study, and the sample sizes were small for some of the relations reported in Table 3, thus limiting the generalizability of the findings. Data on the actual amount of money spent by a heterogeneous set of consumers on their romantic partners, kin, and nonkin members would provide external validity to the current research. Furthermore, in the case of romantic partners, the gift expenditures need to be tracked longitudinally to identify important sex differences in various stages of the relationship. Both anecdotal evidence and published research (e.g., Belk & Coon, 1993) would suggest that men's offerings should decrease as the relationship progresses, whereas the opposite should hold true for women.

The current study demonstrates the usefulness of studying consumption phenomena, such as gift giving, through an "EP lens." It shows how the EP-based predictions of human sex differences in mating strategies unfold in this context, namely, that young males are more tactical than young females when giving gifts to their romantic partners. However, females are well aware of these tactical motives and, probably, act in ways to ascertain a genuine long-term interest among their suitors. Finally, young adults' allocation of their gift-giving expenditures to partners, relatives, and friends concurs with their genetic interests, that is, is in accord with the EP tenet of inclusive fitness maximization. It is hoped that this study, coupled with others that use EP to study marketing-related phenomena (cf. Rajala & Hantula, 2000; Saad & Gill, 2000), will provide the necessary impetus for the appropriate Kuhnian paradigmatic shift.

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