Relationship Ambiance and Condom Use in Greek Young Adults' Dating Relationships

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Abstract

We examined whether ambiance, a qualitative relationship characteristic, predicted condom use in Greek young adults' dating relationships, along with other objective relationship characteristics, such as relationship duration and coital sex frequency. Ambiance definition was based on the fundamental companionate-passionate love distinction. Participants were 277 Greek university students, 18-25 years old, having an ongoing relationship; they provided their basic demographics and information on their relationship, such as duration and coital sex frequency. They also described their relationship, in terms of passionate and companionate ambiance, using the rating scales of an 11-item ambiance measure. Finally, they indicated whether they had used or not used a condom at first, last intercourse and consistently during the last month. We hypothesized that condoms would be used more frequently at first and last intercourse, and more consistently in relationships with predominantly companionate rather that passionate ambiance. Three logistic regression analyses revealed that ambiance predicted condom use and that condoms were used more frequently at last intercourse and more consistently in relationships of companionate rather than passionate ambiance. Further analyses indicated that ambiance qualified condom use effects of relationship duration and coital sex frequency. It is suggested that companionate ambiance focuses partners on the normative aspect of the relationship, increasing protective behavior, while passionate, on the sexual and intimate, undermining it.

Keywords: condom use; relationship characteristics; relationship quality; ambiance; passionate love; companionate love.

Condom Use by Greek Young Adults

There are currently 11,492 people living with HIV/AIDS in Greece or 0.1% of the population. Although, a low HIV/AIDS incidence country by European standards (European Centre for Disease Prevention and Control [ECDC], 2011a), the country has recently experienced a substantial upwards shift in the HIV epidemic. According to the most recent report of the Hellenic Center for Disease Control and Prevention (2011), in 1983 the rate of newly diagnosed HIV infections was 0.1 per 100,000 population, from 1993 till 2003 it ranged between 3.4 to 3.8, to reach 4.9 in 2007 and 7.3 in 2011. Specifically, in 2011 there were 954 newly reported HIV infections. This was an extremely large number as it represented a 57% increase compared with 2010. Sexual transmission accounts for the vast majority of all cases; the largest proportion, 48.2 %, has been diagnosed in men who have sex with men and 22.9% in persons who

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contracted HIV through heterosexual contact. Adolescents and young adults, in the age cohort of 15-29, represent 24.55% of the cumulative HIV seropositive population. In recent years, Greece is also facing a resurgence of Sexually Transmitted Infections, such as chlamydia, gonorrhea, syphilis and chancroid (ECDC, 2011b; Kyriakis et al., 2003; Levidiotou, 2005).

Condom use constitutes the single, realistic, effective and reliable means of protection against HIV and STIs (Weller & Davis-Beaty, 2007; ECDC, 2011b). Promotion campaigns in Greece seem to have transformed the social representation of the condom from a stigmatized, disagreeable and surreptitious necessity to a broadly acceptable and openly discussed health protection product (Kordoutis, Sarafidou, & Loumakou, 2005). More importantly, condom use seems to have improved in recent decades among young adults. Lifetime experience of condom use, a gross indicator of ever having used a condom, did not exceed 64% in 1990, among the age cohort of 20-24 (Dubois-Arber, Masur, Hausser & Zimmerman, 1998), but was about 83% by the end of the decade (Ioannidi-Kapolou & Agrafiotis, 2005). Nevertheless, Kordoutis, Loumakou, & Sarafidou (2000), in a study focusing on condom use with the most recent sexual relationship partner of the past 12 months, found that 62% of young adults were using a condom at first intercourse, whereas 57% at last intercourse. According to the researchers of the study, the mere maintenance of the relationship accounted for the sharp drop in condom use, from first to last intercourse. In this same study, condom use consistency within the relationship did not exceed 36%. From a health promotion perspective, inconsistent condom use is nearly as risky for contracting STIs and HIV as no condom use. Hence, if the aims of research supporting condom use promotion is to increase effective protective behavior, more attention should be paid to the context of condom use, that is, the sexual relationship.

The goal of the present study is to examine condom use by Greek young adults, within their ongoing dating relationships. More specifically, we intend to examine whether specific relationship characteristics can predict frequency and consistency of condom use. We will focus both on the role of a qualitative relationship characteristic that has not been studied before, relationship ambiance, and on well-studied objective characteristics, such as relationship duration and frequency of coital sex.

For a long time, condom use research has dealt with the demographic factors and intra-personal processes (e.g., attitudes towards sex and protection, health beliefs) associated with the decision to use a condom (Moatti, Hausser, & Agrafiotis, 1997).

The present study draws upon recent theory and research (Noar, Zimmerman, & Atwood, 2004, for a review), which suggests that condom use is a decision taken under the influence of the specific characteristics of the close interpersonal relationship in which it actually occurs. Some of the studies adopting this relationship perspective on adolescents' and young adults' condom use behavior tend to focus on the descriptive characteristics of relationships. Usually, they conceptualize relationship characteristics into objective and qualitative ones. Next, we define the two sets of characteristics and briefly review some of the studies that employ them in predicting condom use within relationships.

Objective and qualitative relationship characteristics associated with condom use

Objective characteristics may refer to relationship duration, frequency of sexual intercourse, length of the pre-sexual intimate relationship and acquaintance, partners' age, cohabitation, asymmetry of sexual experience and incompatibility in terms of sociodemographic variables ("heterogamy"), such as age, race, ethnicity and education. Research has established some associations between objective characteristics and condom use. For instance, duration (Catania, Stone, Binson, & Dolcini, 1995; Civic, 1999; Ku, Sonenstein & Pleck, 1994; Fortenberry, Tu, Harezlak, Katz, & Orr, 2002) and frequency of coital sex (Ku et al., 1994; Katz, Fortenberry, Zimet, Blythe & Orr, 2000) are both negatively associated with condom use.

Qualitative relationship characteristics refer to partners' perceptions about the relationship. Along with other cognitions and processes, they make up the lay theories people use to understand, predict and evaluate relationship interactions and guide own behavior (Fletcher, 2002). Although theory and research have linked sexual behavior with lay theories of intimate relationships (Hendrick & Hendrick, 2000, Sprecher & Regan, 2000), research on condom use has eschewed theoretical conceptualizations of qualitative relationship characteristics. Instead, it has resorted to limited definitions capturing basic antithetical aspects of relationships, such as the significance of the relationship to one's life (e.g., casual/serious, exclusive/non-exclusive, main or primary/concurrent or secondary) and the temporal aspect (e.g., short-term/long-term, one night stand/date, new/established). Few studies on condom use have attempted to tap the rich cognitive content of young adults' relationships. According to Apostolidis (1993), condoms were less likely to be used in the more emotionally invested "loving"

relationships, than in ones described as "sexual". Bauman & Berman (2005) identified three relationship types, "messing", "boy-girfriend" and "hubey-wifey", reflecting low, medium and high levels, of commitment, love and trust, respectively. Condoms were used in the "messing" type, less so in the "boy-girlfriend" type, and least in the "hubey-wifey" type. Katz et al., (2000) defined relationship quality based on the saliency of partner in one's life, emotional attachment, happiness, understanding and shared time, and found that high quality relationships were associated with lower condom use consistency. Civic (1999) showed that serious and committed relationships and greater levels of love were associated with decreased condom use consistency. Recently, long duration, high levels of intimacy, commitment and having a positive relationship outlook were associated with less condom use (Manlove, Perper, & Barry, 2010).

In defining relationship characteristics the above studies employ a low-high quality relationship gradient, which overemphasizes commitment and intimacy at the expense of sexual passion. Moreover, passion tends to be confounded with love and romantic feelings. Thus, high quality relationships, as opposed to low quality ones, comprise increased investments in such resources as commitment, trust, relationship salience, attachment, self-disclosure, intimacy, romantic feelings, enmeshment, love and passionate love. This conceptualization of relationship quality disregards the particularities of young adults' relationships and lacks interface with relationship theory, thus, limiting our understanding of the psychological processes by which relationship characteristics may predict condom use behavior. Young people's dating relationships differ inherently, from those of older adults. They are brief and intense in passion, emotional investment and enmeshment. Passion is of paramount importance to these relationships (Sprecher & Regan, 2000), whereas commitment is less important and very fragile. The tendency to meet alternative partners, individual changes in partners' lives and life-goals meet weak barriers to dissolution, compared to relationships of later adulthood (Emmers-Somer & Allen, 2005). From a more theoretical perspective, commitment, passion and intimacy are interrelated and may function concurrently in a close relationship, yet, by most accounts (Berscheid, 2006; Buss, 2006; Fehr, 2003; Regan & Berscheid, 1999; Sternberg, 1986; Vohs & Baumeister, 2004), they are independent psychological processes. Following, based on the fundamental descriptive dimension of passionate and companionate love (Hatfield, 1988), we propose that young adults' relationships be described in terms of the qualitative characteristic of "relationship ambiance".

Relationship ambiance refers to a subjectively perceived set of salient cues or characteristics in a relationship assumed by a partner to reflect own and other partner's internal emotional states arising from relating to each other. For the most part, ambiance comprises two subsets of cues, ones suggesting passionate emotional states or passionate love and ones suggesting companionate feelings or companionate love. Next, we discuss the theoretical underpinnings of relationship ambiance and its association with protective behavior in sexual relationships.

Passionate and companionate ambiance in young adults' sexual relationships

Passionate and companionate love are processes regulating interpersonal behavior within intimate relationships, although they are also experienced as internal states (Baumeister & Bratslavsky, 1999; Hatfield, 1988; Sternberg, 1986; Vohs & Baumeister, 2004). Passionate love ensues from an intense experience of physiological arousal and sexual attraction for the partner. Sexual involvement is quintessential to this kind of love (Hendrick & Hendrick, 2000; 2004). On the other hand, companionate love refers to feelings of affection, intimacy and security between partners whose lives are interdependent on the grounds of trust or expectations of trust (Fehr, 2006; Hatfield, 1988; Hatfield & Rapson, 1990; Murray & Holmes, 2011; Sternberg, 1986). The relative impact of the two processes in the relationship, determines its dominant qualitative characteristics (Hatfield, 1988; Hendrick & Hendrick, 2000; Sternberg, 1986; Vohs & Baumeister, 2004). Partners in romantic relationships are likely to selfdisclose, express thoughts, feelings and behaviors (Laurenceau, Rivera, Schaffer, & Pietromonaco, 2004), that are in line with their prevailing internal state of love, passionate or companionate. Moreover, they actively seek and process cues revealing other partner's state of love during interaction, in order to understand their intentions about the relationship (Fletcher, 2002; Karney, McNulty, & Bradbury, 2003; Reis, Clark, & Holmes, 2004). There is evidence that people conceive love relationships in terms of the distinctive prototypical qualitative characteristics of passionate and companionate love (Fehr, 1988; 2003; Regan, Kocan, & Whitlock, 1998), and distinguish relationships into passionate and companionate (Fehr, 1993). In the present work, we further assume that partners use cues from their relationship, reflecting the companionate and passionate state, to formulate a coherent general impression of the quality of their relationship. By means of this subjective perception of "ambiance" in

their relationship, partners are able to make sense of it, evaluate it, generate expectations and guide own behavior. In that sense, perceiving the relationship as more companionate or passionate in ambiance may affect cognitive processing about self and partner as well as decision-making on key relational transitions (Metts, 2004), including ones referring to their sexual life, such as moving from non-penetrative to coital sex and switching from using condoms to hormonal contraception or to not using any protection.

Passionate, companionate ambiance and condom use

Passionate ambiance, rises swiftly after the onset of a relationship and remains dominant at its early stages; it may continue however, to further define, to a lesser or greater degree the quality of a relationship (Baumeister & Bratslavsky, 1999). Passion, sexual desire, sexual arousal, sex and eroticism, are the core prototypical characteristics of passionate ambiance. What is, primarily, exchanged under passionate ambiance is sex and affect, a unique and specific combination of resources (Byers & Wang, 2004). A partner in such a relationship will focus on exchanging affective and sexual resources (Metts, 2004) with the aim of stimulating intimacy (Baumeister & Bratslavsky, 1999). Maintenance and development of the established level of sexual exchange and intimacy, are more salient and more important to partners, than generally the consequences of their interdependence or, specifically, the possible negative outcomes of their sexual interaction for own and partner's health. Accordingly, we expect that condoms will be used less frequently and less consistently during sexual contacts in relationships of passionate ambiance.

Companionate ambiance, requires the prior development of intimacy among the couple; hence, it rises slowly, but may persevere in the relationship for a longer period (Acker & Davis, 1992; Sprecher & Regan, 2000; 1998). Under companionate ambiance, partners attend to the broad array of resources exchanged in the relationship and the costs and benefits accrued. As a result, evaluating the consequences of their interdependence for self and other is expected to take precedence over sexual exchange (Fehr, 2006; Hatfield, 1988; Hatfield & Rapson, 1990; Murray & Holmes, 2011; Sternberg, 1986). Partners are expected to be more concerned whether the relationship is loving, secure and trustworthy than passionate and sexually exciting. More importantly, the interdependence experience is expected to give rise to the consensual

establishment of norms regulating the partnership. The introduction of protection as an internal to the relationship behavioral norm is compatible to this normative context. Following, condom use should be more frequent and more consistent across instances of coital sex in relationships of companionate ambiance.

Hypotheses. Based on the above conceptualization of passionate and companionate ambiance and the rationale supporting the notion that relationship ambiance is associated with protective decision making within young adults' sexual relationships, we formulated the following hypotheses:

- 1. Relationship ambiance will be a stronger predictor of condom use behavior, that is, of condom use frequency and condom use consistency within relationships, than other objective relationship characteristics, such as relationship duration, coital sex frequency, gender and age.
- 2. Condoms will be used more frequently, at first intercourse, in relationships of predominantly companionate rather than passionate ambiance.
- 3. Condoms will be used more frequently, at last intercourse, in relationships of predominantly companionate rather than passionate ambiance.
- 4. Condoms will be used more consistently during relationships of predominantly companionate rather than passionate ambiance.

Method

Participants

Participants were 300 undergraduate students from University campuses in Thessaloniki and Athens, the two major metropolitan areas of Greece; by participation criteria, they had to be involved in an ongoing heterosexual dating "intimate sexual relationship" for over a month. Twenty three participants did not meet the above criteria and were removed from analyses. The remaining 115 (41.5%) men and 162 (58.5%) women were the participants of the study (N=277); their age ranged between 18-25 years (M=21.52, SD=1.73). None was married, only 3% of them lived with their sexual partner, 32.5% with their parental families, 32.4% with a roommate and 32.1% on their own.

Measures

Measure of Relationship Ambience (MRA) - The MRA, is a short and narrow in scope measure. It intends to tap perceptions discriminating the prevailing ambiance in the dating relationships of adolescents and young adults. Thus, it inquires participants about their perceptions of the relationship itself, rather than their feelings toward their partner (cf. Hatfield & Rapson, 1993,1996; Sternberg, 1988). The measure, comprises eleven words, five capturing passionate (passion, eroticism, desire, arousal, sex) and six, companionate ambiance (love, romanticism, tenderness, affection, security, trust). Instructions asked participants to "first, read through the entire list of words and then, use the scale below each word to show to what extent it describes your relationship". The scale ranged from 1 = it does not describe my relationship at all, to 7=it describes my relationship completely. In selecting the relationship ambiance descriptors, emphasis was placed on the sexual aspect of passion because it is more salient in young people's relationships. Proneness of these relationships to dissolution was accounted for, by excluding reference to commitment, while including pre-commitment constructs (love, trust, security). Finally, rather than depicting full-fledged intimacy (e.g., knowing and understanding the partner, communication), the measure restricted itself to the more affective aspects of intimacy (romanticism, tenderness and affection).

Condom use measures - The basic dependent variable of our study was tapped by three dependent measures. Participants indicated frequency of condom use within their relationship during the last month on a scale ranging from 1=never (have never used a condom), through 4=sometimes, to 7=always (have always used a condom). They also responded on two dichotic measures whether they had used a condom or not at first and last (most recent) sexual intercourse in the relationship.

Procedure

Participants were recruited at university campuses, by posters inviting students with an ongoing dating relationship over a month old, to participate on a voluntary and anonymous basis. The questionnaire administration procedure took place at the respective Psychology Laboratories of the Psychology Departments of the Aristotle University of Thessaloniki and of the Panteion University in Athens. Participants responded to the paper-and-pencil measures individually and privately. The measures, described earlier, were handed to them in the following order: (1) participant's, partner's and relationship questions, (2) MRA, (3) condom use measures. To counter order effects, MRA items were randomized. Similarly, condom use measures (at first, last intercourse and during the last month) were counterbalanced. The administration procedure lasted approximately 20 minutes. Participants were debriefed and thanked for their participation.

Results

Construct validity and reliability of the MRA

A factor analysis with varimax rotation on the MRA items revealed two factors, explaining 71.48% of the total variance (Table 1). The first one, labeled "Companionate Ambiance" represented the basic characteristics of companionate ambiance; reliability analysis on its six items indicated high internal consistency (Cronbach's $\alpha = .89$, standardized $\alpha = .90$, mean inter-item correlation=.59). The second factor, labeled "Passionate Ambiance", was similarly, highly consistent (Cronbach's $\alpha = .92$, standardized $\alpha = .92$, mean inter-item correlation = .71) and depicted the construct of passionate ambiance.

Table 1. Factor Loadings for Varimax Orthogonal Two-Factor Solution for the Measure of Relationship Ambiance

Item	Factor loadings								
Factor 1: Companionate Ambience ($\alpha = .89$)									
Affection	.86								
Love	.81								
Tenderness	.81								
Security	.80								
Romanticism	.77								
Trust	.75								
Eigenvalue	5.19								
% of variance	36.32%								
Factor 2: Passio	Factor 2: Passionate Ambiance ($\alpha = .92$)								
Arousal	.89								
Eroticism	.88								
Passion	.88								
Desire	.87								
Sex	.78								
Eigenvalue	2.67								
% of variance	35.16%								

Note. N=277, c > |.35|.

Relationships of companionate and passionate ambiance

The factorial structure of the MRA and the high additivity of the subscales, reflected in Companionate and Passionate Ambiance factors, allowed us to construct two relationship ambiance indices. More specifically, we constructed the index of companionate (ICA) and passionate ambiance (IPA) by taking the mean of participants' ratings on items loading on each of the respective factors. Subsequently, we categorized relationships into ones where companionate ambiance prevailed over passionate (ICA > IPA) and ones where passionate ambiance prevailed over companionate (IPA > ICA). We called the first category "relationships of companionate ambiance" or for convenience "companionate" relationships and the second "relationships of passionate ambiance" or "passionate" relationships. We were able to categorize all but one of participants' relationships (N = 276) into companionate (158 or 57.2%) and passionate (118 or 42.8%) ones.

Relationships and partners

The mean duration of participant's relationships was about two years (M = 631)days, SD = 494). More than half of the participants (53.8%) stated that they had coital sex three times a week or more, 31.8% about twice a week, 10.8% about once a week, 2.5% about twice a month and 1.1% once a month or less. There were no gender differences in frequency of coital sex or duration. Partner's age ranged from 16 - 34 (M=22.74, SD=3), but an ANCOVA revealed that women had older partners (M=23.83,SD = 3.23) than men (M=21.22, SD=1.77), F(1, 273) = 101.89, p >.0001, partial $\eta^2 =$.27, despite a covariate effect for participant's age, F(1, 273) = 114.73, p < .000, partial η^2 = .30. There was no covariate effect for relationship duration. Another ANCOVA with relationship ambiance and gender as the independent variables, controlling for participant's age, partner's age and frequency of sexual intercourse, indicated that companionate relationships had lasted longer (M = 763.50 days, SD = 506.79) than passionate ones (M = 453.61, SD = 421.55, F(1, 269) = 27.06, p < .001, partial $\eta^2 = .09$). There were no covariate effects. A similar analysis, controlling for participant's age, partner's age and duration, did not show any differences between the two relationship types in coital frequency and revealed no covariate effects.

Condom use

Most participants (77.3%) had used a condom at first intercourse and a lower percentage (59.9%) at last intercourse. In either case, there were no gender differences. In order to examine condom use consistency, participants indicating that they had always used a condom in their relationship or had never used it were considered "consistent users" or "non-users, respectively (choices "7=always" and "1=never" on the frequency of condom use rating scale). Those falling in between the two ends were regarded "non-consistent users". Thus, there were 63.3% non-consistent users, 31% consistent and only 5.7% non-users. There was no gender difference. An already noted, from a health prevention perspective, non-consistent use is equated to no use because both practices pose the same high risk for contracting HIV/AIDS and STIs. Hence, we collapsed non-users and non-consistent users into the same category of "inconsistent users" (69%). In further discussion, we will refer to two categories of condom use, consistent and inconsistent users.

Testing the hypotheses

The hypotheses of our study were tested using three binary logistic regression analyses. Criterion variable in the first analysis was first intercourse condom use (use/no use), in the second, last intercourse condom use (use/no use), and in the third, condom use consistency during the last month of the relationship (consistent/inconsistent use). Predictor variables were gender, participant's age, partner's age, ambiance (passionate/companionate), relationship duration in days, and frequency of coital sex. Results are presented below.

Relationship ambiance and condom use - According to Hypothesis 2, condoms would be used more frequently at first intercourse in relationships of predominantly companionate rather than passionate ambiance. This hypotheses was not supported by results, as there were no predictor variable effects on first intercourse condom use (summary of logistic regression analysis is not shown).

Following Hypothesis 3, condoms would be used more frequently at last intercourse in relationships of predominantly companionate rather than passionate ambiance. The binary logistic regression analysis indicated that there was a relationship ambiance negative effect on last intercourse condom use, a negative effect of relationship duration and a marginal effect of coital sex frequency (Table 2). Specifically, it was more likely to have used a condom in companionate rather than in passionate relationships and less likely to do so, the longer the relationship. The marginal effect of coital sex frequency implied that it was less likely to have used a condom, the higher the frequency of coital sex in the relationship. These findings were consistent with Hypothesis 3.

According to Hypothesis 4, condoms would be used more consistently in relationships of companionate rather than passionate ambiance. Results, however, indicated that both coital sex frequency and relationship ambiance were strong predictors of condom use consistency, followed by relationship duration (Table 2). Consistent use was more probable in relationships of relatively low coital sex frequency, in companionate rather than passionate ones, and in shorter rather than longer relationships. These findings are in line with Hypothesis 4.

Table 2. Summaries of Logistic Regressions Analyses Predicting Condom Use at Last Intercourse and Condom Use Consistency During the Last Month in the Relationship

	ν σ										
		Fre	quency	of condom	use at last	Condom use consistency during the					
				intercourse		relationship					
Variable	В	SE	OR	95% CI	Wald	В	SE	OR	95% CI	Wald	
Gender	28	.31	.78	.41-1.40	.79	27	.33	.76	.38-1.47	.65	
Participant's age	05	.09	.95	.80-1.13	.31	04	.09	.96	.80-1.16	.15	
Partner's age	.01	.06	1.01	.90-1.13	.02	.02	.06	1.02	.91-1.14	.09	
Relationship duration (days)	001	.00	.99	.99-1.00	9.57**	.001	.00	1.00	1.00-1.001	5.47*	
Coital sex frequency	29	.16	.75	.55-1.02	3.33†	.42	.16	1.52	1.12-2.07	7.19**	
Relationship Ambiance	-1.04	.29	.36	.2062	13.11***	.80	.30	2.23	1.23-4.04	7.03**	

Note. OR=Odds ratio. Variable coding was as follows, gender, 1= men, 2 = women; relationship ambiance, 1 = companionate, 2 = passionate; frequency of intercourse ranged from 1= less frequently than once a month to 7=more than three times a week; condom use at first and last intercourse, 0= no use, 1= use. Condom use consistency, 0 = consistent, 1=inconsistent.

 $t^{\prime}p = .07, **p < .01, ***p < .001$

Hypothesis 1 suggested that relationship ambiance would be a stronger predictor of condom use frequency and consistency than other predictor variables pertinent to objective relationship characteristics, such as duration and coital sex frequency. Hypothesis 1 was tested by the very same analyses, mentioned above, used to test Hypotheses 2-4. As already said, none of the suggested variables predicted condom use at first intercourse. However, ambiance was indeed the strongest predictor of last intercourse condom use and an equally strong predictor of consistent use along with the two objective relationship characteristics, relationship duration and frequency of coital sex (Table 2). Hence, Hypothesis 1 was, for the most part, supported by our results.

Relationship ambiance, relationship duration, coital sex frequency and condom use - Ex post facto, we re-examined the association of condom use at last intercourse with ambiance, by controlling for the objective relationship characteristics that were marginally or significantly associated with condom use at last intercourse, that is duration and coital sex frequency. Following Manlove et al. (2010), we divided relationships into "short-term" (45.5%), that is, ones equal or shorter to 365 days, and "long-term" (54.5%), ones that were over a year long. A cross-tabulation with relationship ambiance indicated that 61.9% of participants had used a condom at last intercourse in long-term companionate relationships, whereas 77.4% in short-term companionate, χ^2 (1, N=158) = 3.81, p = .05. There was no difference in last intercourse condom use between participants in short-term passionate relationships (54.8%) and long-term passionate ones (42.2%), χ^2 (1, N=118) = 1.76, p > .05 (Table 3).

Table 3. Condom Use at Last Intercourse (%) and Condom Use Consistency (%) in Relationships of Companionate and Passionate Ambiance by coital sex frequency and relationship duration

	Relationship Ambiance														
	Companionate (N = 158)								Passionate (N = 118)						
Coital sex	Infrequent		Frequent		Very		$\chi^{2}(2)$	Infrequent		Frequent		Very		$\chi^{2}(2)$	
			frequ		<u>ent</u>						<u>frequent</u>				
Condom use	Yes	<u>No</u>	Yes	<u>No</u>	Yes	No	2.78	Yes	<u>No</u>	Yes	<u>No</u>	Yes	<u>No</u>	.97	
	76.9	23.1	70.9	29.1	61	39		61.5	38.5	45.5	54.5	50	50		
Consistency							6.06*							2.01	
	50	50	43.6	56.4	27.3	72.7		38.5	61.5	21.2	78.8	20.8	79.2		
Duration	Short-term Long-term		-term			$\chi^2(1)$	Short	t-term	Long	-term			$\chi^2(1)$		
Condom use							3.81*							1.76	
	77.4	22.6	61.9	38.1				54.8	45.2	42.2	57.8				
Consistency							1.54							2.21	
	43.4	56.6	33.3	66.7				27.4	72.6	15.6	84.4				

Note. *p < .05, **p < .01. Long-term relationships > 365 days, short-term \le 365 days. Infrequent coital sex (= few times to 1-3 times a month), frequent (= 1 to 2 times a week), very frequent (= over two times a week).

Similarly, we re-examined the association of ambiance with last intercourse condom use by controlling for coital sex frequency. To do so, we collapsed responses on the frequency of coital sex scale, into three categories: "infrequent coital sex" (responses from 1 = less frequently than once a month to 3=about twice a month), "frequent" (responses 4 = about once a week, and 5 = about twice a week) and "very frequent" (responses 6 = three times a week and 7 = more than three times a week). There were 14.4% relationships in the "infrequent coital sex" category, 31.8% in the "frequent" and 53.8% in the "very frequent" one. Last intercourse condom use did not differ, between the three categories of coital frequency neither in companionate relationships, χ^2 (2, N=158) = 2.78, p > .05, nor in passionate ones, χ^2 (2, N=118) = .965, p > .05 (Table 3).

As in the case of last intercourse condom use, we inspected the association of relationship ambiance with consistency of condom use, controlling for duration and frequency of coital sex. There was no association of condom use consistency with duration categories in companionate, χ^2 (1, N=158) = 1.54, p > .05 or passionate ambiance relationships, χ^2 (1, N=118) = 2.21, p > .05. Condom use consistency, however, was associated with coital sex frequency categories, in companionate relationships. Condoms were used most consistently in companionate relationships with infrequent coital sex (50%) and least in ones with very frequent coital sex (27.3%), while consistency in companionate relationships with frequent coital sex fell in between

(43.6%), χ^2 (2, N=158) = 6.06, p < .05. There was no association between condom use consistency and coital sex frequency categories in passionate relationships, χ^2 (2, N=118) = 2.01, p > .05 (Table 3).

Discussion

Condom use

Although, our sample is a non-probabilistic convenience one, it is useful to compare our descriptive findings to those in the study by Kordoutis et al. (2000), which also involved Greek young adults' dating relationships, about ten years earlier. Condom use frequency at first intercourse was found to be higher in the present study (77.3%), than in the past one (62%), while condom use at last intercourse seemed to range at the same, more or less, levels (59.9%, present study, 57% previous one). The drop between first and last intercourse condom use within a relationship is even sharper in the present study (77.3% vs. 59.9%) than in the past one (62% vs. 57%). Similarly, condom use consistency within the relationship was low in the past study (36%) and is even lower in the present one (31%). Young people seem to back away from the protection practice, simply as their relationship unfolds in time. These descriptive findings highlight the importance of understanding the role of relationship factors, such as relationship ambiance, in predicting condom use. Next, we discuss the results of testing the hypotheses associating relationship ambiance with condom use.

Relationship ambiance and condom use

Our findings on condom use frequency and consistency, largely, supported our hypotheses. In line with Hypothesis 1, the qualitative relationship characteristic of ambiance was the primary predictor of condom use at last intercourse followed by the objective characteristic of duration. Moreover, it was an equally strong predictor of condom use consistency during the last month of the relationship, along with coital sex frequency and duration. As predicted by the third and forth hypotheses, condoms were used more frequently and more consistently in relationships of companionate ambiance rather than in ones of passionate.

Ambiance captures the relative contribution of the competing prototypical qualitative characteristics of companionate and passionate love to the perceived quality of a relationship. In companionate ambiance, companionate love characteristics are more salient, than those of passionate love, focusing partners on the normative behavior of protection and on securing the well-being of both self and other. By using a condom, participants behaved in a manner coherent to the cues of trust, security and love emanating from the companionate context. Condoms were used more often and more consistently, possibly, because they were viewed as a means of caring for the self, the partner and the relationship per se. Past studies (Choi, Rickman, & Catania, 1994; Sarafidou & Chliaoutakis, 1994; Hewleg-Larsen & Collins, 1994; Klein & Knauper, 2003; Kordoutis, Sarafidou, & Loumakou., 2005; Spencer, 1996), concentrating on condom use cognitions, have often identified positive attributions for deciding to use a condom, with a distinct focus on interpersonal concerns. Such attributions have included "caring for partner", "securing own and partner's experience of pleasure", "being responsible for partner" and "being able to concentrate on the relationship without concerns about risks".

By contrast to companionate ambiance, the passionate one enhances the saliency of developing intimacy, engaging partners in emotional communication and sexual exchange at the expense of rational considerations about unprotected sex. Arousal, passion and sex, set a framework in which initiation and negotiation of the condom is perceived as undesirable and threatening to the cherished intimacy of the moment and, generally, the relationship. It is then, very likely, that partners, in this setting, willingly refrained from initiating condom use to avoid confrontation with each other or disrupt sexual exchange and the process of intimacy (cf. Cline, Johnson, & Freeman, 1992; Klein & Knauper, 2003; Hillier, Harrison, & War, 1998).

The fact that ambiance or any other relationship characteristic was not found to predict condom use at first intercourse (Hypothesis 2) implies that relationship processes (including the perception of ambiance) might not have a significant impact on condom decision making at this early stage of relationship development, when sexual exchange between the partners is just starting. Perhaps, other variables, more relevant to the individual partners rather than the relationship, could have played a role in predicting condom use, at first intercourse. Future studies could consider individual sexual profile (e.g., sexual debut, number of sexual partners) and intra-individual processes (e.g., health beliefs, attitudes towards protection and sex).

How do our findings associating ambiance to condom use compare to past literature? Our brief review of relevant research, in the introduction, suggested that condoms are used less often in relationships described as "steady", "long-term", "loving", "intimate", "trusting" and "high-quality", than in ones depicted as "casual", "short-term", "sexual", "passionate" and "low-quality". If we compared the former set of descriptors to the companionate relationships of the present study and the latter set to the passionate ones, then we would conclude that our findings are contradicting those of past research for we have found the opposite. Condoms were used more often and more consistently in companionate rather than passionate relationships. However, this comparison is unwarranted because both companionate and passionate relationships were defined and operationalized in the present study as steady and not casual. More importantly, they are both, on the one hand, "loving", "trusting", "intimate", "high-quality" and on the other, "sexual" and "passionate", albeit to different degrees.

Relationship ambiance, objective relationship characteristics and condom use

Contrary to past research (Dubois-Arber, Masur, Hausser & Zimmermann, 1998; Kordoutis et al., 2000; Ku et al., 1994; Lazarus et al., 2009; Manlove et al., 2007; Sarafidou & Chliaoutakis, 1994), and in line with more recent findings (Bajos et al, 2010; Herlitz & Forsberg, 2010; Manning et al., 2009), we did not find gender, age and partner age (age asymmetry) effects on condom use. It is possible that such differences have subsided in the Greek context due to shifting generational norms that regulate age difference dynamics and gender roles. The lack of age effects in itself, is not surprising, considering that we studied a section of older young adults, within a relatively narrow age range (18-25 years of age, *M*=21.52, *SD*=1.73).

On the other hand, our findings about the effects of duration and coital sex frequency on condom use were consistent with previous research, (e.g., Fortenberry et al., 2002; Katz et al., 2000). Condoms were used less frequently and less consistently, the longer the relationship and the more frequent the coital sex (Table 2). Interpretations of this common finding (Abraham, Sheeran, Abrams, Spears, 1996; Ku et al., 1994; Noar et al., 2004), are based on "contraception switch", intimacy development and familiarity (Civic, 2000; Hammer, Fisher, Fitzgerald, & Fisher, 1996; Kordoutis et al., 2005; Maticka-Tyndale, 1992). Presumably, time passing and increased frequency of sexual contacts raises unwanted pregnancy concerns, making

contraception more important than condom use. In addition, partners start feeling that condoms are unnecessary, believing that no health threat can arise from a well-known and trusted partner ("defensive denial", Hammer et al., 1996; Sprecher, 1990). By switching to chemical contraception, the communication stress of condom initiation is avoided, while intimacy and trustworthiness are not disturbed (Bown & Michael-Johnson, 1989; Oncale & King, 2001; Hammer et al., 1996; Maticka-Tyndale, 1992; Wingood & DiClemente, 1988). Taken together, these interpretations imply that duration and coital frequency effects on condom use may be attributed to concurrent qualitative relationship characteristics, reflecting relational issues of trust and intimacy (cf. Macaluso et al., 2000). Although not initially hypothesized, our study provides evidence that the qualitative characteristic of ambiance can qualify how duration and coital sex frequency is associated with condom use (Table 3). This argument is explicated, for both duration and coital sex frequency, in the respective discussion sections that follow.

Ambiance and duration

Condom use level at last intercourse was lower in long-term, than in short-term companionate relationships, whereas it did not differ between long-term and short-term passionate ones. At the same time, condoms were generally used more frequently in companionate than in passionate relationships, irrespective of their duration (Table 3). Perhaps, condom use makes a lot of sense in companionate relationships, by expressing partners' care for the well-being of each other, and little sense in passionate ones, being an obstacle to sexual expression and a threat to intimacy build-up. Thus, condom use is low at the outset of passionate relationships, and remains low throughout their comparatively short length. In contrast, as the longer companionate relationships unfold in time the protection norm weakens. Possibly, this occurs because, norms associated with companionate ambiance, such as trust and security, gradually get better established and partners start deceptively feeling that these qualities, per se, defend them against the threats of unprotected sex (Catania et al., 1995; Civic, 2000; Comer & Nemeroth, 2000; Hammer et al., 1996; Katz et al., 2000; Misovich et al., 1997).

Ambiance and frequency of coital sex - Condoms were used most consistently in companionate relationships of infrequent coital sex and least in ones of very frequent coital sex, whereas companionate relationships of frequent coital sex fell in between.

As in the case of the association between ambiance and duration, the pattern of association between ambiance and coital sex frequency, was not observed in passionate relationships, where the overall level of consistent use was much lower than in companionate relationships (Table 3). Perhaps, the normative context of companionate ambiance and the time span intervening between each sexual contact in companionate relationships of infrequent sex, allow enough time and cognitive resources to be dedicated to the rational processing of the consequences of unprotected sex; thus, they permit better adherence to the protection norm. By contrast, in companionate relationships of frequent and very frequent sex, the short time span between each sexual intercourse, probably, does not allow partners sufficient time or resources to rationally think about the consequences of unprotected sex and act accordingly (Canin, Dolcini, & Adler, 1999; Civic, 2000; Donohew et al., 2000; Kelly & Kalichman, 1995). Moreover, increased frequency of sexual contacts is likely to enhance interpersonal similarity, inadvertently reducing risk perception and the need to adhere to the condom use norm (Civic, 2000; Hammer, et al., 1996; Kordoutis et al., 2005; Maticka-Tyndale, 1992). Contrary to the companionate ambiance, the passionate one hardly places any normative pressure for protection upon partners. Setting up intimacy and ascertaining the sexual facet of the relationship are more important concerns in these relationships than protection. Hence, consistency in condom use is low under passionate ambiance, to begin with, leaving little room for further decreases.

Limitations and implications for future research

The construct validity and reliability of the MRA suggest that this measure may be a valid, reliable and practical means of exploring the notion of ambiance. However, no claims are made that this is the optimal way of operationalizing the construct. Our operational definition is attuned to the specific nature of young adults' dating relationships and the need to study the brief sexual interaction involving condom use. Thus, the measure is limited in scope, leaving out important aspects of relationship content and functioning, such as the interactional dynamics of the couple (cf. Manning et al., 2009). Future research should broaden the present operational definition of ambiance.

The correlational and cross-sectional nature of the present study does not allow the causal inference that ambiance influences protective behavior. A prospective experimental design, asking participants to indicate their behavioral intentions to use a condom, under different ambiance conditions would be one way to demonstrate the causal relationship between ambiance and condom use intentions. However, a more appropriate, theoretically informative and ecologically valid way, should involve a longitudinal study. A long-term follow-up of intimate sexual relationships, measuring ambiance status along with condom use in sexual interactions, at different time intervals, could demonstrate whether ambiance shifts actually prompt predictable changes in condom use behavior. A design of this nature would require the use of a daily experience method (Fortenberry, Cecil, Zimet, & Orr., 1997), in both evaluating ambiance and measuring condom use. This method could also secure a more objective and accurate measurement of condom use frequency and consistency across sexual contacts within a relationship and could amend for the pitfalls of using recall measures of condom use (Noar, Cole, & Carlyle, 2006) as the ones employed in the present study.

The dependent measures used in this study were informative about the association of ambiance with condom use, but hardly on the processes underlying this association. In interpreting our findings, we have assumed that such processes are at work by arguing that interdependence norms are more salient in companionate relationships whereas sexual exchange and intimacy is more salient in passionate ones. However, this assumption should be subjected to empirical scrutiny by future research, possibly, in a design that would use a more elaborate set of dependent measures to tap the cognitive processes involved in condom use decision making.

Conclusion

We have argued for the importance of studying condom use within the relationship context. At the same time, we have criticized past studies adopting the relationship perspective for conceptualizing young people's dating relationships in a simplistic, unidimensional and unrealistic manner. Past studies have used relationship descriptors with no reference to relationship content and theory, thus, depriving research on condom use of the ability to interpret findings in a theoretically meaningful manner. Moreover, most relationship descriptors have placed emphasis on commitment and casual sex, while downgrading the role of passionate sex.

The present work introduced a simple but theoretically informed perspective on describing relationship perceptions, in order to study young adults' protective behavior

in dating relationships. The construct of relationship ambiance assumes that perceptions of relationships are composite, comprising relationship cues emanating from partner's expression of passionate and companionate love in relationship interactions. These cues or characteristics compete for saliency in partners' relationship perception. Our findings suggested that when companionate features prevail over passionate, condoms are used more frequently, whereas, when the opposite obtains, they are used less. Different processes were assumed to work in each ambiance setting. Under companionate ambiance, protective norms of interdependence increase protective behavior, whereas, under passionate ambiance, sexual exchange and intimacy undermine it. Ambiance was further found to qualify the effects of relationship duration and coital sex frequency on condom use. The well known in the literature "sawtooth" pattern of condom use decline from short-term to long-term relationships was observed only under companionate ambiance. Similarly, reduced condom use was observed in relationships of very frequent coital sex, rather than of frequent or infrequent, but only under companionate ambiance.

Our study carries a useful message for prevention campaigning that targets audiences of young adults. There is probably a lot to be gained in realism and effectiveness by promoting the condom with reference to the relationship context. Emphasis should be placed on the insidious hurdles posed to initiating condom use during intercourse by the ambiance that the partners perceive in their dating relationships.

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