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A quantitative study of "friends with benefits" relationships

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Abstract: Canadian undergraduates (146 men and 135 women; ages 18-40, *M* = 20.9, *SD* = 3.4) described their experiences with "friends with benefits" relationships (FWBRs). Responses were coded and analysed using chi-square contingency tables and multinomial regression analysis. Study results link some of the previously identified advantages and disadvantages of FWBRs to relational outcomes (whether the experience was positive, negative, or neutral; and willingness to enter a FWBR again). Most participants reported positive (38%) or neutral (37%) FWBR experiences, yet 40% indicated they would not enter a FWBR again. Developing emotional complications throughout the relationship occurred in 22% of participants, men and women equally, and strongly predicted negative outcomes (odds ratio 9.5, $p < 0.001$ for negative experience; odds ratio 2.8, $p = 0.007$ for not wanting a FWBR again). Women were also significantly more likely than men to enter the relationship, hoping it would evolve into dating ($p < 0.001$), and to express desire to avoid a FWBR in the future (odds ratio 3.3, $p < 0.001$). Results indicated that other gender differences in FWBRs are nuanced, and both confirm and depart from the traditional gender norms.

Introduction

Casual relationships are gaining increased acceptance by young people today (Manning, Giordano, & Longmore, 2006). One type of such relationships is "friends with benefits," defined as a "new relational style that blends aspects of friendship and physical intimacy" (Owen & Fincham, 2011a, p. 311). Consequently, most academic investigation into the phenomenon of friends with benefits relationships (FWBRs) occurred only within the last decade (Weaver, MacKeigan, & MacDonald, 2011).

In the literature, FWBRs have been uniformly characterized by (a) sexual intimacy, (b) ongoing friendship, and (c) desire or agreement between the participants to avoid official romantic commitment (Bisson & Levine, 2009; Hughes et al., 2005; Lehmiller, VanderDrift, & Kelly, 2011; Owen & Fincham, 2011a). This definition, however, is vague. While the first characteristic seems obvious, it remains unclear whether "ongoing friendship" is a requirement for a FWBR. Furthermore, does every couple engaging in a FWBR "desire or agree" to begin this form of relationship? How does this account for those who simply "plunge into" this form of connection? We prefer to define a FWBR as a relationship between two people who begin as friends or acquaintances and subsequently introduce some degree of sexual intimacy for an undetermined period of time, which participants themselves regard as a non-dating relationship. Existing literature demonstrates that approximately 50 to 60% of young people have been involved in at least one FWBR in their lifetime (Bisson & Levine, 2009; Hughes, Morrison, & Asada, 2005; Puentes, Knox, & Zusman, 2008); including adolescents as young as 14 (Chernin, Rich, & Shing, 2010).

Virtually all research on the subject of FWBRs comes from the U.S. However, many social differences exist between Canadians and Americans, which could translate into "cross-cultural differences in sexual attitudes and behaviours" (Fischtein, Herold, & Desmarais, 2007, p. 452). For example, Canadians report lower religiosity compared to Americans (measured through service attendance), and 40% of Canadians under the age of 25 do not identify with a particular religion (Fischtein et al., 2007). Meanwhile, religion or morality was listed as a common reason to avoid FWBRs in the U.S. (Bisson & Levine, 2009). Also, church attendance was inversely correlated with the likelihood of establishing a FWBR in the U.S. (McGinty, Knox, & Zusman, 2007).

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For these reasons, FWBRs may be more common or accepted in Canada. As such, there is value in studying FWBRs within the Canadian cultural landscape. To date, only two Canadian studies examining FWBRs have been published (Weaver et al., 2011; Wentland & Reissing, 2011). Both of these studies utilized qualitative samples of 26 and 23 participants, respectively, suggesting that additional research in this area is warranted.

Advantages and impacts of FWBRs

The most commonly cited reasons and advantages of FWBRs are hardly surprising: sex, particularly with a trusted, comfortable, and safe other, while avoiding romantic commitment (Bisson & Levine, 2009; Weaver et al., 2011). Additional factors**,** described by the same authors**,** include positive emotions and the pleasure of the experience, closeness and companionship, non-exclusivity and a sense of freedom, and opportunity or convenience.

The mention of pleasure is consistent with other findings. Participants in FWBRs were highly likely to report hedonism (i.e., focus on pleasure rather than relationship**)** as a value (Puentes et al., 2008; Richey, Knox, & Zusman, 2009). There is also an interesting notion that the appeal of FWBRs may be time-limited as a good fit for the current stage of life. Being at college or university is seen as an exploratory period of personal development, with an expectation of cultivating more serious relationships upon growing older (Kalish, 2009; Weaver et al., 2011).

Weaver et al. (2011) provided insight into the two-fold justifications for avoiding commitment. On one hand, there is the wish to escape the drawbacks associated with it, such as drama, complications, worry, hurt, and "messiness" (Weaver et al., p. 46). On the other hand, there is the desire to pursue freedom, non-exclusivity, experimentation, and independence. Probing further, Weaver et al. assessed how many participants were non-exclusive in FBWRs, both through their own study and in citing work by Patterson and Price (2009). Patterson and Price conducted an Internet-based survey of 297 individuals, while Weaver et al. performed semi-structured interviews with 26 young adults. Interestingly, both studies arrived at the exact same number: 44% of participants in each case reported sexual relations with more than one partner concurrently. These findings demonstrate that the majority of FWBR participants (i.e., 56%) pursued non-committed yet exclusive liaisons. It appears that steering clear of the effort required in building traditional relationships may be slightly more common than having multiple sexual partners.

Some researchers have questioned whether the reasons for and experiences of people entering FWBRs reflect a conscious decision. In other words, "How much thought is given to the decision to start a FWBR? Epstein, Calzo, Smiler, and Ward (2009) conceptualized FWBRs as closely related to hook-ups, which are primarily spontaneous in nature. Once triggered by immediate stimuli such as sexual drive, alcohol, or stress, hook-ups follow an established script. These authors consider the addition of friendship and the possibility of ongoing encounters as the only differences between FWBRs and hook-ups. Owen and Fincham (2011a) reported that alcohol increased the odds of engaging in a FWBR but also that thoughtful adults were more likely to avoid FWBRs even when alcohol was present. These two studies suggest that the decision to enter a FWBR is impulsive and governed by immediate cues with little regard for future consequences.

In contrast, Bisson and Levine (2009) and Weaver et al. (2011) found that many participants in FWBRs were seeking trust and comfort, as well as consciously avoiding emotional complications and potential hurt associated with romantic commitment. Trust and safety also advantageously distinguish FWBRs from hook-ups, in that hook-ups are more likely to involve a risk of pressure into unwanted sexual activities (Paul & Hayes, 2002). These observations suggest that the choice of FWBRs over either random encounters or traditional dating relationships is an examined decision. Clearly, both scenarios for entering a FWBR, spontaneous and examined, seem to take place. At present, it is not known how prominent each of these scenarios is or how gender or situational context affect the decision-making process.

Despite concerns expressed in both academic literature and popular culture about psychological damage, Eisenberg, Ackard, Resnick, and Neumark-Sztainer (2009) found that casual sex presents no increased risk of harm. Psychological well-being

scores on body satisfaction, self-esteem, depressive symptoms, and suicidal ideation "were notably similar across sex partner categories, spanning less than one point in many cases" (Eisenberg et al., p. 234). Bay-Cheng, Robinson, and Zucker (2009) commented on the limitations of existing research, noting that there is a difference between showing no increased risk and obtaining benefit. These authors claim that the academic literature is as affected by the negative bias toward sexuality as is popular culture, since most studies are designed to investigate the harm rather than the good outcomes arising from adolescent sexual practices.

Sex and gender differences

Fischtein et al. (2007) reported that a majority of men (55%) compared to a vast minority of women (8%) would entertain the thought of sex with someone they just met. In terms of actual behaviours among adolescents, Manning et al. (2006) found that significantly more boys (68%) than girls (52%) reported a non-dating sexual experience. With respect to FWBRs in particular, gender differences in prevalence rates have also been reported; 54% for men and 43% for women reported such relationships (Owen & Fincham, 2011a). In contrast, Bisson and Levine (2009) found no statistically significant gender differences in prevalence of FWBR experience although their sample of 125 participants was much smaller than the 889 participants in the study by Owen and Fincham.

With respect to reasons for engaging in FWBRs, the findings indicate that men primarily want and value sex whereas women more often emphasize emotional connection (Lehmiller et al., 2011; McGinty et al., 2007). Research indicates that there is a disproportionate distribution of costs and benefits for men versus women when it comes to casual sex (Eshbaugh & Gute, 2008; Grello, Welsh, & Harper, 2006; Owen & Fincham, 2011b; Paul & Hayes, 2002). Men seem to reap the benefits of casual sex which is associated with the lowest symptoms of depression or distress. Women appear to bear the cost in that casual sex is linked to higher prevalence of depression and greater likelihood of emotional ambivalence and regret afterwards. That being said, Dworkin and O'Sullivan (2005) reported on the expressed dissatisfaction of some men with the cultural roles assigned to them and on their expressed desire for more egalitarian sexual dynamics within relationships. Other studies indicating that women do not hold a monopoly on desiring emotional connections to their sexual partners found significant numbers of men who expressed similar preferences (Epstein et al., 2009) or displayed strong commitment to the friendship and closeness aspects of FWBRs (Lehmiller et al., 2011). Indeed, in the Epstein et al. (2009) investigation, most men rejected non-relational scripts and preferred ones that increased emotional closeness.

The traditional "double standard" has been described "as a prescriptive social standard, in which women were permitted to engage in sexual relations only within a committed love relationship, whereas men were permitted to have as many sexual partners as they wanted without condition" (Milhausen & Herold, 1999, p. 361). By the time of their 1999 study of Canadian female undergraduate students, Milhausen and Herold found that 99% of their respondents stated that women could enjoy sex as much as men do, 69% disagreed with women being less interested in sex than men, and 76% stated that sex was either very or somewhat important to them. Despite such attitudes toward sex, the authors also found that most women enforced the idea of a sexual double standard and held negative attitudes toward female promiscuity. However, a noticeable minority (29%) described women with multiple partners positively, using words such as "independent," "unashamed," and "in touch with her own desires" (Milhausen & Herold, p. 365).

Consistent with these observations, Lehmiller et al. (2011) found that most women reported sexual desire as a motive for initiating an FWBR, although not a primary one. The authors speculated that the sexual double standard and the need to legitimize sex by emotional involvement might be the issues here rather than women not actually wanting or enjoying sex. Looking at heterosexual Canadian women and casual sex in general, Weaver and Herold (2000) found that sexual pleasure was the most common reason for engaging in casual sex. They also reported that direct experience was correlated with both increased acceptance and expectation of enjoyment from casual sex, which suggests that it was not

necessarily personal experience but rather a socially upheld double standard that held women back from casual sex. This observation probably also pertains to FWBRs, a specific example of casual sex. The continuing importance of social acceptability is also reflected in the study by Weaver et al (2011) who found that 77% of participants believed that women were judged more harshly than men for taking part in FWBRs despite the fact that the female prevalence rate for FWBRs was 43% compared to 50% for men (Owen & Fincham, 2011a; Puentes et al, 2008).

Bay-Cheng et al. (2009) found that FWBRs were associated with the highest self-ratings of desire, wanting, and pleasure compared to all other serious and casual relationship experiences reported by women. While the differences were large and statistically significant between FWBRs and hook-ups**,** they were less so between FWBRs and committed romantic relationships. The significant differences between FWBRs and hook-ups could be explained by the companionate and repeated nature of the former. Grello et al. (2006) partially supported this notion, indicating that FWBRs, far more than hook ups, were associated with affectionate sexual behaviours potentially related to increased emotional intimacy (e.g., kissing, holding hands, and hugging). Female regret about casual sex has also been strongly predicted by having sexual intercourse with a partner only once and by knowing the sexual partner for less than 24 hours (Eshbaugh & Gute, 2008). Thus, it is the hook-up characteristics that carry the heaviest emotional consequences for women compared to those of FWBRs.

The dynamics of FWBRs

Does what happens during the course of FWBRs, explain why some participants are satisfied with the outcome and others are not? Common sense suggests that one factor is the extent to which participants' expectations are fulfilled. By FWBR definition, these expectations include a straightforward and simple relationship without commitment or complications. Therefore, it is not surprising that developing unreciprocated feelings and getting hurt, or hurting another as a result, is the most frequently reported drawback of FWBRs. This is followed by the loss of friendship, and other negative feelings reflecting emotional complications: awkwardness, jealousy, and hurt (Bisson & Levine, 2009; Weaver et al., 2011).

Gender may explain different levels of satisfaction with FWBRs. Women are more likely to hope for and discuss a change in a FWBR, while men are more likely to wish for it to remain the same (Grello et al., 2006; Lehmiller et al., 2011; Owen & Fincham, 2011a). Since unreciprocated feelings have been named as the highest source of risk and unhappiness in FWBRs, this could contribute to the difference in relationship satisfaction rates. If women are more likely to enter the relationship hoping for commitment or to develop a desire for it in the process, they could be more likely to be unhappy with the FWBR arrangement.

Bisson and Levine (2009) found that despite the propensity of FWBRs to change (almost half of their sample indicated raising questions and uncertainty about status, future, and feelings), participants did not engage in explicit conversations about their relationship. A significant majority (i.e., 77%) indicated there was no discussion of ground rules, and conversations about relationship maintenance and development usually weren't initiated either. Weaver et al. (2011) confirmed that such communication tends to be either indirect or superficial. To the extent that FWBRs have ground rules (Hughes et al., 2005; Weaver et al., 2011), these rules appear to be understood implicitly and this understanding may therefore vary from person to person. All of this suggests the potential for a vicious cycle for participants in that the desire to keep things simple prevents relationship negotiations from taking place and, ironically, the lack of negotiation creates the very difficulties that the participants were trying to avoid.

In such circumstances, some individuals may attempt to avoid the topic. However, topic avoidance has generally been found to be positively related to relationship uncertainty and to the perception that disclosure carries risks. That being said, "individuals may sometimes prefer the unknown to the discovery of undesirable information"(Afifi & Burgoon, 1998, p. 266). Afifi and Burgoon found that people in cross-sex friendships were more likely to avoid conversations about the state of their relationship and about relational norms than were people in

dating relationships. While topic avoidance may be motivated by self-protection and relationship protection, research suggests that high levels of avoiding discussion about relationship concerns tend to be associated with lower levels of relationship satisfaction across both romantic and non-romantic relationships (Dailey & Palomares, 2004).

Among the two other core components of FWBRs, sex and friendship, the evidence is mixed on which one plays the leading role in FWBRs. Most authors have viewed FWBRs as primarily a sexual relationship with a focus on benefits (Hughes et al., 2005; Richey et al., 2009). McGinty et al. (2007) suggest that women's socialization to assess relationships in terms of emotional value reflects a gender difference in the importance attached to the friendship component of FWBRs. With respect to women's experience, McGinty et al. note that "women regard a [FWBR] as emotional with the emphasis on friends while men tend to view the relationship as more casual with an emphasis on benefits (sexual)" (p. 1130). Despite the apparent emphasis on non-commitment and sex in FWBRs, Lehmiller et al. (2011) unexpectedly found that both men and women in their sample of over 400 people displayed significantly stronger commitment to friendship than to the sexual part of the relationship. They suggested that in FWBRs, "regardless of partner's sex, friendship comes before benefits" (Lehmiller et al., p. 281).

This observation suggests that interdependence, bonding, and avenues of social and emotional support could be crucial to all interpersonal relationships, for both men and women (Sprecher & Regan, 2002). Perhaps, existing literature has focused too much on the sexual aspects of FWBRs and somewhat overlooked the potential support structures within these relationships. At the same time, communication difficulties and lack of relationship discussions, as underlined by Bisson and Levine (2009), could compromise the effectiveness of these support structures.

Research objectives and hypotheses

The present study examined the experiences of Canadian female and male undergraduate university students who had either been in or were currently involved in a FWBR. The data originally collected by the second author were drawn from a qualitatively-coded questionnaire completed by 155 men and 150 women. The current quantitative study explored whether any of the reasons for or expectations of FWBRs reported by participants in the original qualitative study predicted relationship outcomes. Three primary hypotheses that emerged from the literature review were probed in order to understand the dynamics of FWBRs. Secondary hypotheses related to the effects of traditional gender roles on FWBRs were similarly tested.

Hypothesis 1: ***Wishfulness***

We hypothesized that participants who entered a FWBR explicitly wanting it to progress into dating would be less likely to report a positive experience and less likely to engage in a FWBR again compared to participants who entered a FWBR for any other primary reason (such as sex, fun, or avoiding commitment). This hypothesis checks the possible mismatch between the relationship hopes that participants sometimes harbour and the "no-strings" nature of FWBRs.

Hypothesis 2: ***Developing unreciprocated feelings***

We hypothesized that participants who indicated that they expected no emotional commitment, but who found that unreciprocated feelings developed during the course of the relationship, on either side, would be more likely to report a negative experience and avoid engaging in a FWBR again**,** compared to the participants whose "no-strings" expectations were met. This hypothesis tests the most commonly mentioned disadvantage of FWBRs and seeks to determine whether this disadvantage alone is sufficient to predict FWBR outcomes.

Hypothesis 3: ***Comfort***

We hypothesized that those participants who listed comfort as a salient reason for being in a FWBR would be no more likely to report negative outcomes than the average participant. This hypothesis considers how well FWBRs address the need for comfort, and predicts that the friendship, companionship, and intimacy components should enable an adequate level of support for such relationships.

Secondary Hypotheses

Since gender norms were only partially challenged in this study, we expected that the results would

be mixed but that traditional norms would still hold for the majority of participants. We therefore hypothesized that: (a) women would be more likely than men to want a relationship change or would indicate a desire for commitment as a reason to enter a FWBR; and (b) women would be more likely than men to view their experience as negative and avoid FWBRs in the future.

Methods

This study took the extensive data on FWBRs collected by the second author in a qualitative study (Fraser, 2010) and translated the findings into a quantitative research study. The design of the present investigation thus has some unique aspects related to having to work with an existing data set and its limitations.

Sampling procedure and participant recruitment

A detailed description of sampling procedure and questionnaire development can be found in Fraser (2010). A briefer, but necessarily substantive, summary is presented here to illustrate the validity of the sampling methods involved.

Participants were recruited using the university research participation system and compensated with a bonus course credit. Participants were presented with an informed consent form and an online anonymous questionnaire. The consent form described the study as an investigation of men and women's perceptions, expectations, and experiences with FWBRs, with the intent of better understanding this type of relationship. Anonymity was seen as a way to obtain more honest answers on sensitive topics. To protect anonymity, after reading the informed consent form, the participants had to press "I agree" to participate instead of signing. The participants were explicitly told they could decline to answer any question or exit the study at any time without consequence.

In an attempt to reduce the likelihood that individuals who did not qualify for the study would proceed, those with no experience of FWBRs were asked to refrain from continuing. However, they were assured that they would still receive the bonus credit. The participants who chose to stay completed the questionnaire and were electronically debriefed upon completion.

Participants

The data set received from Fraser (2010) included 305 participants, all of whom were undergraduate psychology students at the University of Calgary. All the participants reportedly had direct experience of at least one FWBR. Seven entries were eliminated due to duplication, two for being underage (i.e., 17-years-old), and 15 more were dropped due to failing to provide meaningful answers about both reasons and expectations for engagement in the FWBR. The remaining sample used in the analysis included 281 participants (135 women, 146 men), ranging in age from 18 to 40 (M = 20.9, SD = 3.4).

Preliminary review of qualitative data

For the purposes of the present quantitative study, the previously collected qualitative data (Fraser, 2010) had to be coded and translated into categories suitable for quantitative analysis. Participants in the qualitative study answered a total of 12 questions but not all of the response sets could be used, e.g., some were dropped because no feasible research questions emerged from either the literature review or the review of the data itself. Given the nominal nature of most of the data, chi-square contingency tables test of independence was chosen as the main method of analysis.

In order to determine how to best use secondary data analysis to establish suitable post-hoc hypotheses, the first author read through the entire data set and then consulted with the third author to create a preliminary list of potential research questions. These questions informed our decisions about which response sets needed to be coded and which should be excluded. A literature review was used to confirm and refine the final hypotheses.

Retention and exclusion decisions

In order to assess responses to the question of whether participants would ever engage in another FWBR, the FWBR-related response information based on gender, reasons, expectations, pros and cons, and relationship outcomes was retained for the analysis. We excluded response information on age, ancestry, sexual orientation, whether the person was in a FWBR at the time of the survey or in the past, how long the current or past relationship lasted, and whether the FWBR turned into a dating relationship.

Two exclusions, age and sexual orientation, reflect the process. With respect to age, the sample age range was 18-40 years but 83.6% of the participants (235 people) were between 18- and 22-years-old, and only 10% of the sample (28 people) were 25 or older. Consequently, there was not enough statistical power to obtain valid answers about age differences in FWBRs. Given that 94.7% of participants (266 people) identified as heterosexual, the same problem of insufficient statistical power applied to sexual orientation.

Coding procedure

Categorization of FWBR questions based on gender, relationship outcomes, and the likelihood that a participant would ever again engage in another FWBR was relatively straightforward. In relation to gender, all participants identified as either male or female. The relationship outcomes question was partially closed-ended ("Would you consider your participation in a friends with benefits relationship overall a positive, negative, or neutral experience and why?") but the three response options left virtually no ambiguity. Categorizing whether participants would enter a FWBR again was also simple with "yes", "no" and "uncertain/depends" for everything in between. It was far more complex to develop categories for reasons for and expectations of FWBRs because the information was solicited through open-ended questions. The expectations question was effectively a two-part question and was broken down as such. i.e., expectations "What were your expectations going into a FWBR?" and expectation fulfillment ("Was it what you expected?"). Pros and cons were not treated as independent predictors but were used to better understand expectation fulfillment. Hence, no categories had been developed for them. Preliminary categories for reasons, expectations, and expectation fulfillment were developed and illustrative examples were found and discussed. The resulting lists of operationalized categories informed the actual coding procedure.

The final categories for reasons to engage in FWBRs were attraction, avoiding emotional commitment, seeking comfort, convenience, fun and experience, closeness with a friend, wishfulness (hoping that the FWBR develops into a more committed relationship), spontaneity ("just happened," as several participants described it), wanting sexual release, seeking uncommitted sex, and other. The categories for expectations from FWBRs were similar and involved avoiding emotional commitment, fun and experience, friendship, wishfulness, no specified expectations, sexual release, uncommitted sex, and other. Response categories for whether expectations were met included (1) yes, (2) no, due to developing emotional complications, (3) no, for any other reasons, (4) mixed results, and (5) more work than expected.

Coding for reasons, expectations and expectation fulfillment

The first author and a second rater used the foregoing categories to independently code reasons, expectations, and expectation fulfillment. While participants sometimes listed several reasons or expectations, a decision was made to identify the most salient reason or expectation so that there was only one reason and one expectation category per participant for the analysis. Intercoder reliability was determined by both the raw percentage of agreement and Cohen's kappa, with 86% and .84 for reasons, 82% and .80 for expectations, and 65% and .56 for expectation fulfillment, respectively. Lower inter-coder agreement on expectation fulfillment was attributed to scarcity of information (explained fully below) in the discussion of missing values. All disagreements were reconciled through discussion, and only post-reconciliation categories were used in the analysis.

Resolving categorizations

To illustrate the process of resolution, here is an example of an expectation for a FWBR that caused discussion: "She understood me better than anyone else at the time and we were both comfortable around each other." One of the raters interpreted this as close friendship, while the other focused on comfort as the key word. It was decided that the participant did not appear to be actively seeking comfort, and was instead mostly describing a companionate relationship with a friend. This reason was coded as "closeness with a friend".

Another example addresses the issue of salience: "No expectations really, I hoped we could stay friends. It was a spontaneous thing." One rater paid attention to the lack of expectations, while the other focused on the stated desire to stay friends. It was decided that the hope to remain friends represented an expectation,

indicating that "no expectations really" was not fully accurate. As a result, "I hoped we could stay friends" was seen as more salient than "no expectations," because the participant was effectively saying, no expectations aside from hoping to stay friends. The final code for this expectation was "friendship". An assumption was made that avoiding commitment is a basic characteristic of FWBRs, so if a participant decided to mention something else, it was treated as salient. For example, "Simply attracted to the person, wasn't looking for a serious relationship" was coded as "attraction" rather than "avoiding commitment".

A decision was made to keep the two sex-related categories for both reasons and expectations separate, as sexual release emphasized sexual needs and desires per se, while uncommitted sex focused on achieving them non-exclusively or without commitment. There were enough people in each category to enable valid follow-up analysis to establish whether this distinction matters.

Responses coded as "other" were treated as missing values in the analysis. There were four of these in the outcomes (people failed to provide an answer), three in the expectations, and 41 in expectation fulfillment. For the latter two, "other" referred to situations where expectations did not fit any remaining category and also to cases where participant expectations could not be identified from the information provided. Participants frequently failed to answer the "was it what you expected?" part of the question. For 118 people (42%), answers to pros and cons in conjunction with reasons and expectations had to be reviewed to estimate whether their expectations were met, and in the end, 41 (14.6%) were still left unknown.

Here is an example of using additional information to establish expectation fulfillment. The reason for entering a FWBR was, "I was afraid of committing to a relationship." The expectation response stated only, "I was not thinking in the long term. Just have fun." The pros and cons were listed as, "It is a nice experience in the short term. Jealousy ultimately came into play, as it eventually developed into feelings. One-sided feelings." This was coded as the "developing emotional complications" category.

Multinomial logistic regression procedure

A second analysis of relational outcome predictors was performed using the multinomial logistic regression (MLR). MLR is a regression model used when both dependent and independent variables are categorical, and the dependent variable has three or more levels (Orme & Buehler, 2001). The rationale behind adding the MLR analysis was its greater statistical power compared to the chi-square contingency tables, and as such, lower risk of Type I error and improved ability to detect effects on the same sample size. MLR analysis also includes odds ratios, providing a convenient measure of effect size and a practical interpretation for the effects. Odds ratios are not available in SPSS chi-square crosstabs that are greater than 2 x 2.

Several MLR analyses were run with relationship experience assessment and willingness to enter a FWBR again as dependent variables, with reasons, expectations, expectation fulfillment, and gender as independent variables. SPSS output of the results of each analysis included the overall model significance, and significance of each parameter's effect on the change in dependent variable relative to a referent category. Additionally, a post hoc analysis was performed (willingness to enter a FWBR again by relationship experience assessment) to help interpret the main results.

Results

Reasons for and expectations and outcomes of FWBRs

The most common reason to enter a FWBR was avoiding emotional attachment; however, as an expectation, it was only the second most common. The most common expectation from a FWBR was the ability to maintain a friendship. Valid percentages in descending order for specific categories of the most salient reasons and expectations are summarized in Table 1.

In cases where expectation fulfillment was identified, meeting expectations was the most common result (45%), followed by developing emotional complications (21.7%), mixed results (13.8%), no for any other reason (12.5%), and running into more work than expected (7.1%). Relationship experience

Table 1 Descriptive results for reasons for entering and expectations of FWBRs

Reasons		Expectations	
Avoiding emotional commitment	17.8%	Friendship	19.1%
Sexual release	12.8%	Avoiding emotional commitment	16.9%
Fun and experience	12.5%	Fun and experience	15.5%
Uncommitted sex	11.4%	No specified expectations	15.5%
Seeking comfort	10.3%	Uncommitted sex	12.2%
Spontaneity	8.9%	Sexual release	11.5%
Attraction	7.8%	Wishfulness	9.4%
Wishfulness	6.4%		
Closeness with a friend	6%		
Convenience	5%		
Other	1.1%		

assessments were mostly positive and neutral (37.9% and 36.8% respectively), with only a quarter of participants reporting a negative experience (25.4%). Nonetheless, 40.1% of participants indicated that they would not enter a FWBR again, 35.4% said they would, and 24.5% were uncertain or felt it depended on circumstances.

To test the three primary hypotheses and examine which factors influenced relationship outcomes, several chi-square contingency tables were analyzed using IBM SPSS. The tables included: experience assessment by reasons, expectations, and expectation fulfillment; willingness to enter a FWBR again by reasons, expectations, and expectations fulfillment; and all the above-mentioned categories by gender. Examination of the effect of reasons on experience assessments or willingness to enter a FWBR again failed to produce statistically significant results. It appears that the reasons to enter a FWBR and relationship outcomes were independent in this sample.

Expectations analysis fared better and showed that both experience assessments and willingness to enter a FWBR again were linked with relational expectations, $\chi^2(12) = 24.12$, $p = 0.020$, and $\chi^2(12) = 26.13$, $p = 0.010$, respectively. Expectation fulfillment demonstrated even greater significance with $\chi^2(8) = 66.78$, $p < 0.001$, and $\chi^2(8) = 36.78$, $p < 0.001$, respectively. This indicates that what the expectations were and how they were met had a strong effect on how the participants saw their FWBR experience and whether they would be willing to try it again.

The MLR results (Table 2) largely confirmed and expanded on the chi-square results, although they threw doubt onto the role of expectations in predicting relationship experience assessments. While the expectations model overall showed statistical significance with $\chi^2(12) = 23.8$, $p = 0.022$, none of the specific expectations parameters turned out to have a statistically significant effect on relationship experience assessments. At the same time, both the overall model ($\chi^2(12) = 26.5$, $p = 0.009$) and several of the expectations parameters were statistically significant when evaluating whether participants would choose to enter a FWBR again. All the statistically significant results of the MLR analyses are presented in Table 2.

Evidence for the primary hypotheses

To understand the specific effect of expectations and expectation fulfillment on relationship outcomes, the SPSS output crosstabs were examined in detail using residual analysis, as suggested by Haberman (1973), and the MLR odds ratios. Adjusted residuals (AR) translate the difference between the expected count and a particular observed count into z-distribution, while taking into account the overall sample size (Bearden, 2011). Haberman concluded that AR indicated the importance of each cell to the final chi-square value in large tables better than standardized residuals. Therefore, this method allows for direct comparisons between cells in the crosstabs output in tables larger than 2 x 2. The value of AR more extreme than +/-1.96 indicates that the cell in question has significant contribution to the obtained chi-square value, with the equivalence of two-tailed $p < 0.05$. It is important to remember that AR magnitude reflects

Table 2 Statistically significant parameters for FWBR expectations and expectation fulfillment models in the MLR analysis

Expectations and the willingness to enter a FWBR again model

Parameter description and referent category	Odds ratio	*p*-value	B (MLR coefficient)
Wishfulness: *no* compared to *yes*	**12.0**	**0.001**	2.485
Wishfulness: *uncertain* compared to *yes*	**7.5**	**0.028**	2.015
No expectations: *no* compared to *yes*	**4.0**	**0.016**	1.386
No expectations: *uncertain* compared to *yes*	**7.0**	**0.005**	1.946
Fun and experience: *uncertain* compared to *yes*	**4.2**	**0.034**	1.430

Expectation fulfillment and experience assessment model

Parameter description and referent category	Odds ratio	*p*-value	B (MLR coefficient)
Emotional complications: negative compared to neutral	**9.5**	**< 0.001**	2.252
No for any other reason: negative compared to neutral	**5.8**	**0.002**	1.760
Mixed expectations: positive compared to neutral	**0.3**	**0.007**	-1.241
More work: positive compared to neutral	**0.1**	**0.003**	-2.380
No for any other reason: positive compared to neutral	**0.2**	**0.013**	-1.464

Expectation fulfillment and willingness to enter a FWBR again model

Parameter description and referent category	Odds ratio	*p*-value	B (MLR coefficient)
Emotional complications: *no* compared to *yes*	**2.8**	**0.007**	1.045
No for any other reason: *no* compared to *yes*	**17.0**	**< 0.001**	2.837
More work: *uncertain* compared to *yes*	**3.6**	**0.039**	1.286
No for any other reason: *uncertain* compared to *yes*	**7.9**	**0.014**	2.069

only the strength of the association, while MLR odds ratios provide a measure of the effect size.

Hypothesis 1: Wishfulness leads to negative experiences

The results demonstrate support for this hypothesis. Wishfulness led to a higher chance of rating the relationship experience as negative, with AR = 3.0. It also made the participants more likely to say *no* and less likely to say *yes* to whether one would enter a FWBR again, with AR = 3.1 and AR = -2.7, respectively. In the MLR analysis, wishfulness increased the likelihood of both saying "no" and being uncertain by 12 and 7.5 times respectively as compared to saying "yes" Table 2). This means that the participants, who entered a FWBR with expectations of progressing into dating, were indeed much more likely to report negative experiences than those with any other expectation.

Hypothesis 2: Unreciprocated feelings lead to negative experiences

This hypothesis also received strong support. Developing emotional complications produced extreme AR values. It was associated with both higher chances of a negative relationship assessment and lower chances of a positive one (AR = 4.7 and AR = -2.4 respectively), increased the likelihood of not wanting to enter a FWBR again (AR = 2.7), and decreased the probability of being uncertain about this decision (AR = -2.3). Developing feelings was very strongly associated with viewing the FWBR experience as negative, since AR = 4.7 means $p < 0.0001$.

An MLR examination of the expectation fulfillment against experience assessments and willingness to enter a FWBR again shows statistical significance of both the overall models ($\chi^2(8) = 68.54$, $p < 0.001$, and $\chi^2(8) = 38.49$, $p < 0.001$, respectively) and some of the specific parameters. Developing emotional complications increased the chances of a negative relationship experience as compared to neutral by 9.5 times and of saying "no" rather than "yes" to entering a FWBR again by 2.8 times. (Table 2) We can conclude that the most commonly mentioned disadvantage of FWBRs is indeed capable of predicting relational outcomes.

Hypothesis 3: Comfort

Reasons for entering an FWBR were not associated with relational outcomes in the contingency tables. MLR analysis of relational outcomes by reasons

produced an error message, indicating that validity of model fit is uncertain (possibly due to small cell sizes). Consequently, no support for Hypothesis 3 was found nor could any other conclusions about reasons be drawn.

Gender differences

All gender differences in the sample were also analyzed using adjusted residuals (AR) of crosstabs output. Gender effects turned out to be significant in every category considered, and secondary hypotheses were supported.

Willingness to enter a FWBR again

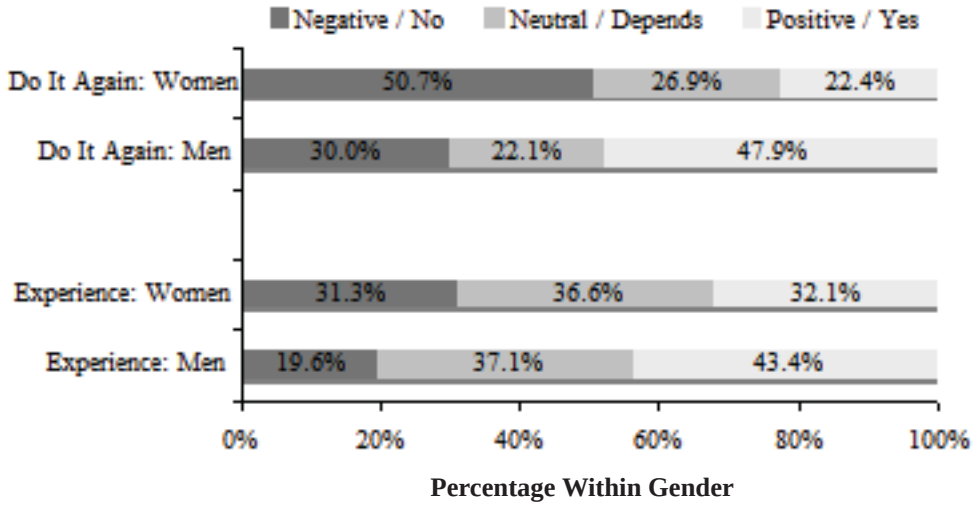
The findings on gender influences on relationship experience assessment and willingness to enter a FWBR again are presented in their entirety in Figure 1. Women were more likely than men to view their FWBR relationship experience as negative, $\chi^2(2) = 6.12$, $p = 0.047$, AR = 2.4. While men were more likely to say "yes" to participating in a FWBR in the future, women appeared more likely to avoid them, $\chi^2(2) = 20.51$, $p < 0.001$, AR = 4.4 and AR = 3.5, respectively.

MLR analysis of relationship experience assessment and willingness to enter a FWBR again by gender both produced statistically significant models ($\chi^2(2) = 6.14$, $p = 0.046$, $\chi^2(2) = 20.92$, $p < 0.001$, respectively), but only the latter also demonstrated significance of specific parameters. Overall, the effects of gender on relational outcomes verify the findings obtained through the chi-square contingency tables. Men were less likely than women to be uncertain or not want to enter a FWBR again ($B = -0.953$, $p = 0.004$, odds ratio = 0.4, and $B = -1.285$, $p < 0.001$, odds ratio = 0.3, respectively). These odds ratios are equivalent to women being 2.5 times more likely to be uncertain or 3.3 times more likely to want to avoid future FWBRs than men.

Reasons for entering and expectations of FWBRs

In both reasons to enter a FWBR and expectations from it, women were more likely than men to display wishfulness; and men were more likely than women to seek and expect sexual satisfaction and sex without commitment, $\chi^2(10) = 40.62$, $p < 0.001$ (AR = 3.1, 4.7, and 2.4) for reasons and $\chi^2(6) = 28.29$, $p < 0.001$ (AR = 3.9, 3.1, and 2.0) for expectations, respectively. At the same time, adjusted residuals pointed to no statistically significant differences in other categories of reasons and expectations. Men and women were very closely matched in most other reason categories but displayed more pronounced

Figure 1 Relational outcomes of FWBRs by gender



Note: Respondents indicated whether they would engage again in a FWBR ("no", "yes" or "neutral") and assessed their overall experience of participation in an FWBR ("negative", "positive" or "neutral").

differences in expectations. The complete gender distribution of expectations of FWBRs is show in Fig.2 and of reasons for entering a FWBR in Fig.3.

Expectations of fulfillment

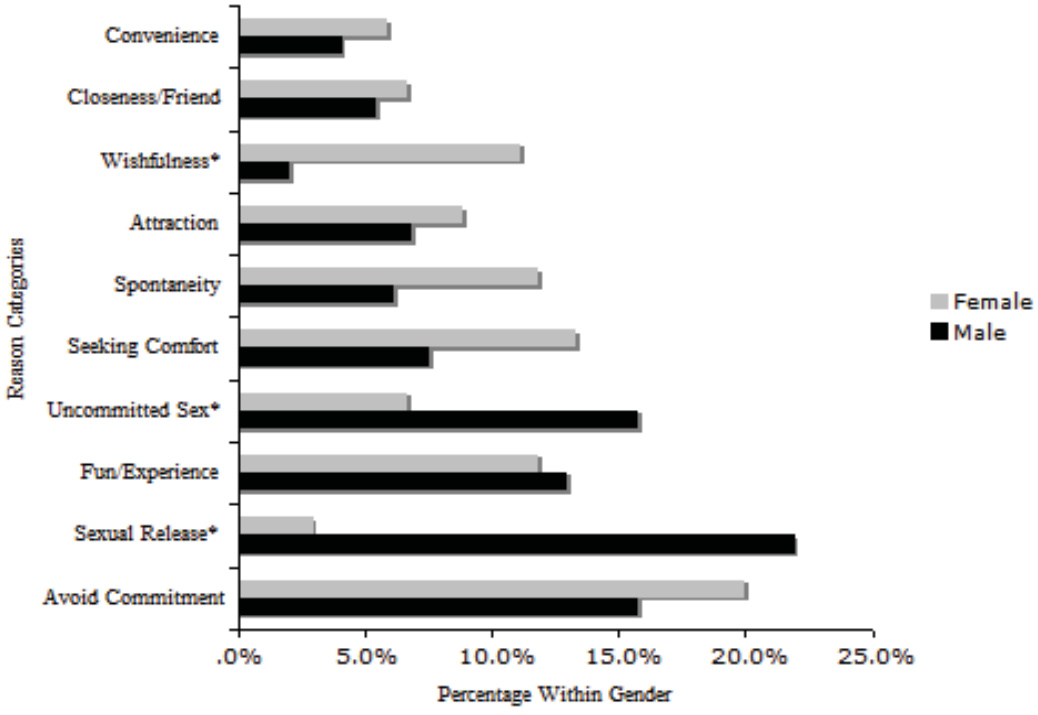
Looking at expectation fulfillment, the only significant difference was in women being more likely than men (20.2% versus 5.6%) (Fig.4) to report that their expectations were not met for reasons other than developing feelings or emotional complications, $\chi^2(4) = 12.56$, $p = 0.014$, AR = 3.4. Interestingly, the difference between men and women in reporting expectations mismatch due to emotional complications was the smallest of all and bordering on non-existent, with AR = +/-0.2, equivalent to $p = .492$. Complete breakdown of expectation fulfillment by gender is displayed in Figure 4 below, with the statistically significant difference denoted with * sign.

Other results

"No specified expectations" was associated with a reduction in both positive assessments and chances of wanting to take part in a FWBR again, with the AR = -2.7 and AR = -2.0, respectively, but no increase in negative assessments. MLR analysis also confirmed that this category led to reduced willingness to enter a FWBR again, as participants were 7 times more likely to be uncertain and 4 times more likely to say "no." The participants expecting "fun and experience" were also 4.2 times more likely to be uncertain rather than certain about wanting to be in a FWBR again.

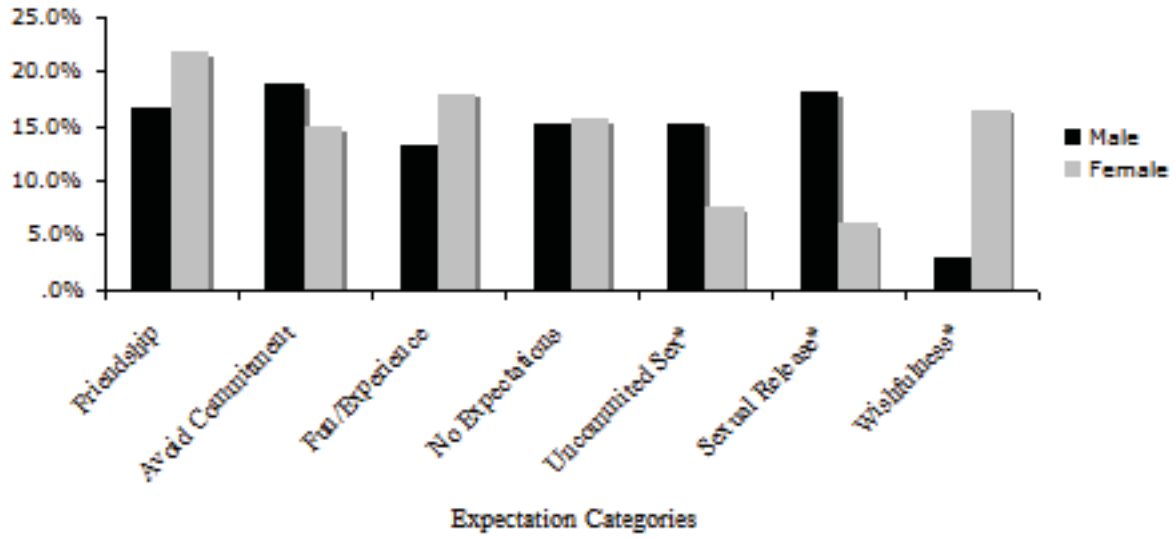
The expectation of "sex without commitment" produced AR = 2.8 for the willingness to participate in a FWBR again. Despite comparable counts (total of 32 and 34, respectively), the expectation of "sexual satisfaction" per se did not produce any statistically significant AR, and neither expectation was linked with relationship assessments. Hence, the participants who placed emphasis on the expectation of non-exclusive sex were uniquely more likely to want to enter a FWBR again than any other group, even though it seems to have had no impact on how they assessed the relationship experience.

Figure 2 Expectations from FWBRs by gender.



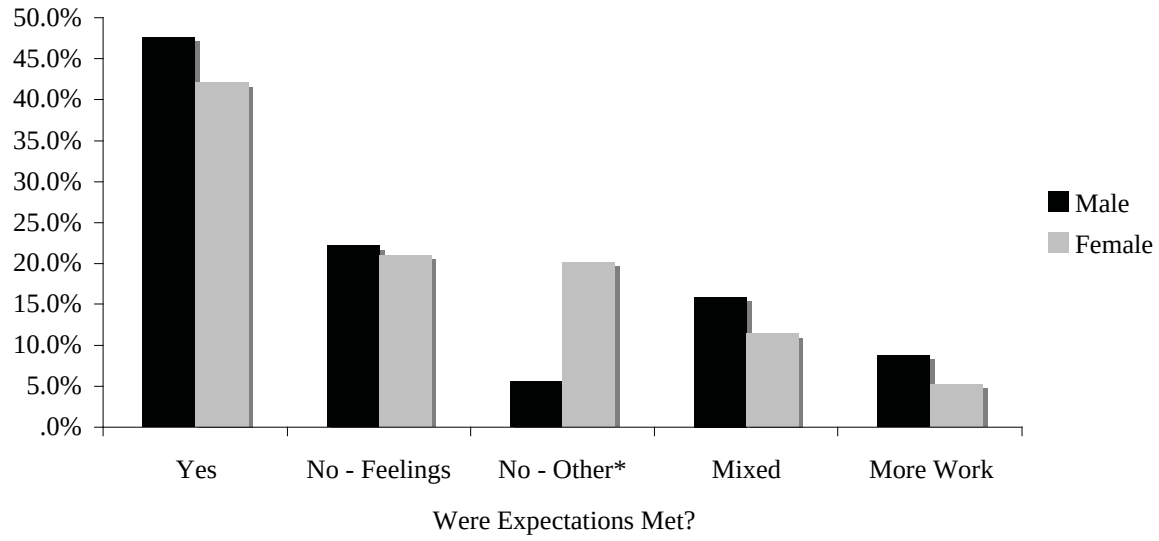
Note: Percentages for statistically significant results (* p < .001) were: women 7.5%, men 15.3% for uncommitted sex; women 6%, men 18.1% for sexual release; and women 16.4%, men 2.8% for wishfulness.

Figure 3 Reasons for entering FWBRs by gender



Note: Percentages for statistically significant results (* p < .001) were: women 6.7%, men 15.8% for uncommitted sex; women 3%, men 21.9% for sexual release; and women 11.1%, men 2.1% for wishfulness.

Figure 4 FWBR expectation fulfillment by gender



Note: Percentages for statistically significant results (* *p* < .001) were: women 6.7%, men 15.8% for uncommitted sex; women 3%, men 21.9% for sexual release; and women 11.1%, men 2.1% for wishfulness.

Despite the small number of respondents, "more work" had a significant effect, reducing the chances of a positive experience compared to neutral by 10 times, and increasing uncertainty about entering a FWBR again by 3.4 times compared to certainty. "Mixed expectations" had a similar effect, making the chance of a positive experience assessment one third that of a neutral. Not meeting expectation for reasons other than emotional complications also had strong effects. Compared to neutral, it increased the probability of negative experience by 5.8 times and reduced the probability of a positive experience by 5 times. It also

increased the chances of both being uncertain and saying "no" to being in a FWBR again as compared to "yes", by almost 8 and 17 times, respectively.

While coefficient of determination does not exist for MLR, SPSS provides three estimates of pseudo R-square (i.e., McFadden, Cox and Snell, and Nagelkerke estimates; UCLA, n.d.). Comparing these values, the model for expectation fulfillment was the strongest as it was capable of explaining 13.3% to 28.3% of variability in experience assessment and 7.6% to 17% of variability in the willingness to enter a FWBR again. Pseudo R-square coefficients for expectations were much lower, explaining only 4% to 9.4% of variability in experience assessment and 4.5% to 10.5% of variability in the willingness to enter a FWBR again. The experience assessment by gender model had extremely low pseudo R-squares, 1% to 2.5%. The willingness to enter an FWBR again fared better, with pseudo R-squares of 3.5% to 8.3%.

Interpretation of differences between relational outcomes when writing the discussion prompted MLR analysis of willingness to enter a FWBR again by relationship experience, in order to obtain pseudo R-square coefficients. The overall model was statistically significant ($\chi^2(4) = 61.25$, $p < 0.001$), yet the pseudo R-square estimates range was only 11.9% – 25.6%.

Discussion

In terms of our hypotheses, the results indicated strong support for wishfulness (wanting the relationship to proceed to dating) and development of emotional complications as potential predictors of negative relationship outcomes (Hypotheses 1 and 2). These findings confirmed what several other researchers (Bisson & Levine, 2009; Weaver et al., 2011) have reported about unreciprocated attachment being the key disadvantage of FWBRs. Almost 22% of the participants reported development of emotional complications, which strongly predicted negative experiences. These individuals were 9.5 times more likely to report a negative experience and almost 3 times less likely to express desire to enter a FWBR again. Wishfulness was more rare, with only 9.4% of participants expressing this expectation, but it had a larger effect. It increased the chances of avoiding or being uncertain about FWBRs in the future by 12 times and 7.5 times, respectively.

Examination of reasons for engaging in a FWBR failed to yield statistically significant results, so there was no support for Hypothesis 3, concerning the role of comfort and availability of emotional support inside FWBRs. There could be several explanations for this result. First, the information about comfort or support that FWBRs can deliver to its participants may have been spread over a number of questions and answers, such as relationship pros, and not really captured well by reasons. Second, the specific reasons for entering a FWBR may not be as relevant to outcomes, as the relationship dynamics. Expectations and expectation fulfillment reflect how the relationship unfolds better than reasons, which may explain their higher predictive ability. If true, the inability to find statistical significance of reasons could, in itself, be a significant finding as it may indicate that future research should look elsewhere for predictors of outcomes. At the same time, insufficient sample size could be the main contributing factor to the result, since reasons had some of the smallest cell counts.

Nonetheless, descriptive results can provide some information about the role of friendship and comfort in FWBRs. Comfort and closeness with a friend were listed as the most salient reasons for entering the relationship by a minority (i.e., 10.3% and 6%) of the participants. While maintaining friendship was the most frequently listed expectation, in absolute numbers it seriously mattered to only one fifth of the participants (19.1%). The categories, developed in this study, closely parallel the advantages and disadvantages described by Bisson and Levine (2009) and Weaver et al. (2011). Consequently, these low frequencies likely reflect genuine differences in prevalence, rather than in categorization between researchers. However, the need to pick the most salient reason or expectation prevented the present study from discovering the total number of participants who may have indicated that comfort was important to them. How well the friendship component of FWBRs supports emotional needs of participants remains a potential direction for future research.

Gender differences and similarities in FWBRs

Support was found for both secondary hypotheses, which predicted that prevalence of negative relational outcomes and wishfulness would be higher among women than men. The similar and sufficiently large numbers of men (n=143) and women (n=134) in this study suggest high reliability of gender analysis. Women were 3.3 times more likely to want to avoid FWBRs in the future and 2.5 times more likely to be uncertain about them than men. Women were also significantly more likely than men to have a negative FWBR experience (32% versus 19% respectively). As predicted, wishfulness was gendered. Consistent with previous research (Grello et al., 2006; Lehmiller et al., 2011; Owen & Fincham, 2011a), women were more likely to display wishfulness than men: 11.1% as reason, 16.4% as expectation for women; 2.1% as reason, 2.8% as expectation for men.

The low percentage of women in our study who identified wishfulness as a primary expectation (16.4%) is consistent with Grello et al (2006) who found that "fewer than one fifth of the females who had had casual sex experiences reported that they thought a romance might be imminent" (p. 264). These numbers suggest that while some women do agree to casual sex hoping it develops into a romantic relationship (Fraser, 2010; Impett & Peplau, 2003) - and the tendency to do so may be persistent - such wishfulness is not generalizable to most women.

It should be noted that Fraser (2010) found that 47% of women and 25% of men in the same dataset expressed a wish for the relationship to turn into a dating one based on their response to the question "Did your friends with benefits relationships turn into a dating relationship? And did you want it to?" (Responses to this question were not used in the present study). Fraser's results are consistent with much higher desire for a romantic relationship reported by other researchers (Lehmiller et al., 2011; Owen & Fincham, 2011a), ranging around 24% for men and 40% to 43% for women. These differences from our findings may be explained by the fact that we attempted to isolate wishfulness as a factor present at the beginning of the relationship in the context of reasons for and expectations of FWBRs. The larger percentages reported by other authors could include both the wishfulness upon entering a FWBR and the feelings, developed over the course of the relationship. Differences in time specifications in how the questions were asked in different studies may also be relevant here.

Wishfulness could partially explain, why more women than men (20.2% versus 5.6%) reported unmet expectations for reasons other than developing attachment. With wishfulness from the very beginning of the relationship, feelings do not need to develop, as they already exist. Lack of reciprocity then leads to increased failure to meet expectations and hopes.

As expected, the findings contained much nuance about gender roles as well. Gender difference in experience assessments came close to being statistically insignificant, and MLR analysis did not identify either gender as a statistically significant predictor of the experience. While relational outcomes overall conformed to the traditional gender expectations, significant minorities of men and women went against this trend. For men, 20% and 30% respectively reported negative experience and unwillingness to enter a FWBR again. And quite a number of women appeared happy with FWBRs, indicating positive experience (32%) and saying *yes* to the prospect of a FWBR in the future (24%).

Consistent with traditional gender roles, men were significantly more likely to seek uncommitted sex and sexual release than women. However, unexpected emotional complications occurred for both men and women with equal prevalence. That both men and women develop feelings is consistent with Epstein et al. (2009) findings about men desiring emotional closeness. We found no statistically significant differences between men and women for the other reasons and expectations, e.g. fun and experience, or emphasis on friendship. Interestingly, more women than men reported avoiding emotional commitment as the main reason to enter a FWBR (20% versus 15%), but more men than women indicated this as primary expectation (19% versus 15%).

Explanations for the within-gender variability of reasons, expectations, and outcomes in FWBRs could be related to changing cultural norms. Yet several frameworks of individual differences exist that could

provide more insight into this matter and represent promising areas for further research. Markey and Markey (2007) linked prevalence of sexual partners and non-committed sexual relationships to the interpersonal warmth dimension of Interpersonal Circumplex. The authors found that individuals, who display both extreme coldness and extreme warmth, tended to have more partners and uncommitted relationships. Markey and Markey speculated that the former might do so out of fear of mistreatment and rejection, or selfishness; while the latter may be motivated by "an opportunity to exchange love, intimacy, or friendship with as many people as possible" (p. 1210). It is possible that warm and cold individuals would differ greatly in their ability to provide emotional support and closeness in FWBRs, partially accounting for outcome discrepancies.

Another framework of individual differences is sociosexuality: a continuum between individuals who require commitment and closeness prior to sex and those who are fully comfortable with casual sex and multiple occasional partners (Simpson and Gangestad, 1991). The extent of individual's sociosexuality and how well partners match each other on this dimension could be related to how comfortable or uncomfortable they may be with the non-committed nature of FWBRs, and how likely they are to maintain this original lack of commitment. Unrestricted sociosexual orientation could also explain why individuals of both genders, who placed emphasis on the expectation of non-exclusive sex, were more likely to want to enter a FWBR again than any other group.

FWBR dynamics and other findings

It is worth noting that while both wishfulness and development of emotional complications had large effects, in absolute terms they only occurred in approximately one tenth and one fifth of the participants. Consequently, they cannot be relied on as a major explanation for most of relational outcomes. This study results confirm that the extent of meeting expectations significantly contributes to both relationship experience assessments and willingness to enter a FWBR again.

The association was significant even for mixed expectation fulfillment and running into more work than expected, despite relatively small counts of participants, who reported these outcomes. The expectations-based findings make so much intuitive sense regarding relationships in general that they hardly teach us anything about FWBRs specifically. However, since the demonstrated statistical strength of associations is extremely logical, it could be interpreted as validation for the method itself. And as such, it could indirectly validate other, less obvious, findings in this study.

It is clear that there are other influences on the willingness to enter a FWBR again, beyond what the experience was like. Almost 40% of the participants had a positive experience and only 25% reported a negative one. However, only 35% of the participants stated that they would enter a FWBR again, while 40% indicated they would not. Furthermore, according to the MLR model, variability in the experience explains only 11.9% to 25.6% of the variability in wanting to be in a FWBR again. This percentage is much less than could be expected. One reason for this finding could lie in personal change experienced during the relationship. Fraser (2010) indicated that a number of women mentioned that "their views had changed, and they realized that they want a real relationship" (p. 33), while men mostly said *no* to a FWBR in the future due to presently dating someone.

Combined, these results could be taken as preliminary support for the conception of FWBRs being something some people can grow out of, as their expectations and desires for relationship change (Kalish, 2009; Weaver et al., 2011). This concept and possible gender differences within it would need to be further verified. If true, it also means that personal characteristics and life circumstances of people, who engage in FWBRs early on as part of sexual and relational experimentation and those who continue to do so later in life, may be different. This presents an interesting suggestion for future studies, especially since investigating FWBRs in older generations has been neglected by research to date.

Some other findings related to relational outcomes were unexpected. It is puzzling that participants who reported "no specified expectations" or "fun and experience" expressed reduced willingness or higher uncertainty about entering a FWBR again.

Unless both results represent a statistical anomaly or mis-coding, it appears that simply going along for the experience is associated with reduced chances of a positive outcome. Potential explanations could be related to the lack of purpose and self-awareness, as genuinely having no expectations is unlikely. And such lack of awareness could contribute to the failure to negotiate an evolving relationship, as highlighted by Bisson and Levine (2009). These results could also be associated with overly positive expectations, increasing chances of disappointment. But ultimately, all that is available at this point are speculations, which might be refined by future research.

While the study formulated no hypotheses about conscientiousness of the decision to enter a FWBR, it has something to contribute to this question. Only 8.9% of the participants listed spontaneity as a salient reason for entering a FWBR. In the raw data, only 4 of the participants mentioned any influence of alcohol at all. This finding is at odds with Owen and Fincham (2011a), but there are other studies on the role of alcohol that it is consistent with.

Wentland and Reissing (2011) used focus groups to explore perceptions of different types of casual sex relationships among Canadian undergraduates. They found that drinking could be used in FWBRs to overcome the awkwardness of initiation, but was not perceived as part of continued relationship. Vélez-Blasini (2008) examined casual sex behaviours in relation to perceived costs and internal conflicts and suggested that rational decision-making was obvious, even when alcohol was present. Vélez-Blasini pointed out that any behavioural research on undergraduate populations that looks into the role of alcohol would likely find significant correlations simply because it is such a widespread part of student experience, while the causal link may be missing.

Study limitations

The core limitation of this study arose from the fact that a very large qualitative dataset was used to perform quantitative research. Consequently, some of the research direction and methods were identified working backwards from the available data, rather than from the questions posed by literature review. As well, some gaps identified in the literature could not be addressed as effectively, since data collection was not specifically designed to do so. The methods section provides considerable detail on these and other challenges and the implicit and explicit limitations they represent so we will restrict our comments here to a few such examples. The quantitative analysis overall relied on taking answers to different questions and treating them as separate predictors which lost some of the narrative aspect that reflected FWBR dynamics. Categorical quantitative analysis also required establishing one category per question per participant and having to choose only one main reason or expectation for the analysis. Good inter-rater reliability could not eliminate the limitations of this process. The age variability in the sample combined with differences in the duration and currency of FWBRs were also confounding factors.

Conclusion

This study has several important strengths. The categories developed were based on rich qualitative data, presented in participants' own words, which improved their ability to accurately reflect the complexity of the phenomena at hand. Independent coding by two raters contributed to accuracy and validity of the categories. In the analysis itself, combined use of adjusted residuals and MLR allowed this study to zero in on specific effects and odds ratios of different predictors, which could be challenging when dealing with categorical variables.

To the authors' knowledge, this is the first Canadian quantitative study of FWBRs, conducted on a relatively large sample of 281 people. As such, it presents a significant contribution to the understanding of FWBRs within the Canadian cultural landscape. It also represents the first attempt to explicitly link some of the previously identified advantages and disadvantages of FWBRs—operationalized through reasons and expectations—to relational outcomes. This study helps to refine what is becoming better understood about FWBRs and what remains unknown, as even though FWBR research is relatively new, it has already covered a lot of ground. The authors believe that future research on FWBRs would benefit from focusing more on why, rather than what, happens during the relationship.

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