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Defining the Relationship: Intentional Decision-Making and Sexual Risk in Adolescent
and Young Adult Romantic Relationships

A Dissertation
Presented to
the Faculty of Social Sciences
University of Denver

In Partial Fulfillment
of the Requirements for the Degree
Doctor of Philosophy

by
Kayla Knopp
August 2019

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ABSTRACT

This dissertation presents three manuscripts addressing different sets of findings related to the “defining the relationship” (DTR) talk in adolescents’ and young adults’ romantic relationships. Paper 1 describes descriptive results from two studies, one utilizing a college undergraduate young adult sample ($N = 341$) and the other using a nationwide online sample of 15 to 17-year-old adolescents ($N = 248$). Key findings from Paper 1 indicate that DTR talks were used frequently in the relationships of young people, and were associated with relationship commitment and sexual behaviors. Paper 2 describes more in-depth analyses testing associations between having a DTR talk before having sex and sexual safety and functioning among a subset of the adolescent sample ($N = 163$). Results from Paper 2 demonstrated that having a DTR talk before having sex with a relationship partner was linked with safer sex behaviors, including delaying sex and using contraception more frequently. Finally, Paper 3 is an educational case study about the research methods used to collect data from the adolescent sample, and is included as a supplement to describe the study methodology in greater detail than was appropriate to include in the other two manuscripts. Together, results from this dissertation project suggest that the “defining the relationship” talk may be an important feature of young people’s romantic relationships and provide a foundation for the study of DTR talks in future research.

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CHAPTER ONE: GENERAL INTRODUCTION

Although it may be known by different terms – “the DTR,” “the talk,” and “to DTR,” to name a few (“DTR,” 2018) – the “defining the relationship” talk is a nearly ubiquitous idea in the popular culture of romantic relationships among young people in the U.S. Discussion about the DTR talk can be found in many advice columns, lifestyle blogs, dating websites, and even *Psychology Today* (Lusinski, 2015; Marie, 2016; Stanley, 2014; Yagoda, 2016). Despite its clear relevance to young people’s romantic lives, the DTR talk has been the subject of very little empirical research, leaving psychological researchers and clinicians unable to knowledgeably advise the lay public about the risks, benefits, and best practices of having DTR talks in their romantic relationships. This dissertation project aims to begin filling this gap by providing both a conceptual foundation for understanding DTR talks from an academic perspective and preliminary data describing how young people currently use DTR talks in their relationships.

Paper 1 describes the theoretical background and existing research that is helpful for understanding the concept of DTR talks in modern relationship contexts, with an emphasis on the role of DTR talks in resolving ambiguity or uncertainty about relationship status and commitment. Paper 1 then presents initial descriptive data from two different U.S. samples for whom DTR talks are relevant: a university undergraduate sample (Study 1) and a nationwide teen sample (Study 2). In both samples, the data show

that DTR talks are used frequently in young people's relationships, and reveal associations between DTR talks and relationship features including commitment, fidelity, and sexual activity. Among the adolescent sample in Study 2, particularly important findings emerged regarding links between DTR talks and safer sexual behaviors.

Paper 2 further explores the link between DTR talks and sexual decision-making that was suggested by Paper 1. Specifically, Paper 2 investigates the timing of the DTR talk relative to sexual activity in teens' relationships. Results supported the hypothesis that teens who had a DTR talk with their relationship partner before having sex with that partner would engage in safer sexual behaviors, including more frequent condom and birth control use and longer delay of sex in the relationship. Although the correlational data used in Paper 2 do not support causal inferences, these findings do suggest that DTR talks may be related to more conscientious decision-making across multiple relationship domains, and underscore the need for further research investigating the function of DTR talks and whether training in how to have DTR talks could be part of relationship skill intervention programs that increase healthy decisions about relationships and sex among adolescents.

Finally, Paper 3 presents a narrative of the data collection methodology from the adolescent sample in the form of an educational case study. This paper was peer-reviewed and published in the SAGE Online Research Methods reference database for use by students and instructors of psychological research methods. Paper 3 is included as part of this dissertation project to provide a detailed account of the methods used to collect data about relationships and sexual behaviors from the adolescent sample, which may have consequences for the validity and implications of the findings that are

important to consider. Further, Paper 3 outlines the many considerations for conducting relationship research with minors and aims to illustrate the feasibility of online methods for this topic of research.

CHAPTER TWO: PAPER 1, “DEFINING THE RELATIONSHIP’ IN ADOLESCENT
AND YOUNG ADULT ROMANTIC RELATIONSHIPS”

Abstract

“Defining the relationship” (DTR) conversations are a topic of great interest among lay individuals and yet have been the focus of very little empirical research, leaving a gap in the psychological literature on romantic relationship development. This paper describes a conceptualization of DTR talks and presents descriptive data from two studies about the characteristics and correlates of DTR talks in adolescents’ and young adults’ romantic relationships. In Study 1, DTR talks were found to occur in over half of the young adult participants’ ($N = 341$) most recent relationships, often involved discussion about aspects of commitment and sexual decisions, and occurred more often in relationships that were more serious, involved sex, delayed sex, and involved infidelity. Study 2 extended these findings to an online sample of 15 to 17-year-old adolescents ($N = 248$) and found similar results regarding frequency, content, and correlates of DTR talks in teens’ most recent relationships. Further, Study 2 found that DTR talks were associated with more frequent condom and birth control use. Qualitative data from Study 2 indicated that planning for the future and resolving ambiguity were common motivations for DTR talks, though many teens also reported more spontaneous motivations; qualitative data also indicated that DTR talks most often resulted in positive changes in the relationship, including increased clarity, intimacy, and commitment. These

findings suggest that DTR talks are an important topic for future research and may have implications for young people's relationship quality and sexual health.

Background

Commonly known as “the DTR,” “the talk,” or alternatively, “to DTR,” the “defining the relationship” (DTR) talk is a common focus of popular culture. Indeed, at the time of this writing, a Google search for “[define or defining] the relationship” leads to 41 million hits, from advice columns on pop culture websites such as Bustle.com (Lusinski, 2015) and People.com (Yagoda, 2016) to guides from dating website eHarmony (“15 ways to have a successful ‘define the relationship’ talk,” 2016) and relationship experts (Stanley, 2014). Urban Dictionary houses an extensive record of popular lay definitions and usage of the term “DTR” (“DTR,” 2018). In 2016, the dating website Tinder even released a podcast called *DTR* that addresses the complexities of forming relationships in the age of myriad dating technologies (Marie, 2016). Clearly, the DTR talk is an important – and likely often fraught – component of modern romantic experiences. It is most often conceptualized in lay terms as a means of establishing the nature or status of a romantic relationship (“DTR,” 2018), especially in terms of the level of commitment and the exclusivity of the relationship. In other words, the DTR talk can be used to answer the questions, “What are we and where is this headed?”

Despite its prevalence in popular culture, very little empirical research has addressed the frequency, features, or correlates of the DTR talk in romantic relationships. The aim of the current study is to build on the small existing research base by proposing a conceptualization of DTR talks, arguing for its importance in the relationships of young

people, and presenting a foundation of empirical data on the characteristics and correlates of DTR talks among two samples, one of young adults and one of adolescents. In the following section, we highlight the theoretical grounding upon which our conceptualization of the DTR talk is built, followed by a summary of existing DTR research and a description of the two studies that comprise this paper.

Theoretical Foundation

Ambiguity. Since the early 2000s, relationship scholars have been observing an increase in the ambiguity of young people's relationships (Glenn & Marquardt, 2001; Lindsay, 2000; Stanley, 2009; Whitehead, 2003). Researchers have used the framework of ambiguity to understand the wide range of motivations for and outcomes of premarital cohabitation (Stanley, Rhoades, & Fincham, 2011), as well as the highly variable conceptualizations of and expectations for dating among both young adults (Glenn & Marquardt, 2001) and adolescents (Rowley & Hertzog, 2016). Larson and colleagues (Larson, Wilson, Brown, Furstenberg, Jr., & Verma, 2002) argued that modern young adults experience romantic relationships that are less scripted by community norms, have higher expectations for quality and intimacy, and require greater versatility in relationship skills. Further, as the average age of marriage increases, more young adults experience a protracted period of dating, during which both casual and committed relationships are common (Shulman & Connolly, 2013). Together, these lines of research suggest that relationship choices are increasing in both number and complexity, and pre-existing scripts for expected relationship trajectories are becoming less common and less clear. Thus, partners can likely no longer assume they will share the same expectations for a

relationship. Vennum and Fincham (2011) argued that this context of ambiguity suggests a need for active decision-making about relationships. Consistent with this idea, Stanley (2009) posited that the cultural phenomenon of the DTR talk arose in conjunction with and in response to the rise in ambiguity. We propose that the DTR talk has become increasingly important for helping young people make decisions about relationships in a context of widespread ambiguity.

Relational uncertainty. Growing ambiguity in romantic relationships suggests that individuals are also likely experience greater uncertainty about their relationships; the less clearly defined a relationship is, the more uncertain partners are likely to feel about one's own and one's partner's relationship intentions, as well as about the future of the relationship (i.e., self, partner, and relationship uncertainty; Knobloch & Solomon, 1999). We propose that a fundamental purpose of the DTR talk is to reduce uncertainty about partners' perceptions of a relationship's status. Uncertainty Reduction Theory (URT; Berger & Calabrese, 1974) highlights the fact that interpersonal communication is often motivated by lacking a current understanding of a another person's attitudes, feelings, or behaviors. Since URT's conception, interpersonal relationship researchers have advanced the study of the dynamics of relational uncertainty across relationship development, maintenance, and dissolution (e.g., Knobloch, 2010; Owen et al., 2014). Uncertainty is bidirectionally associated with reduced communication with the relationship partner (Knobloch & Theiss, 2011); that is, uncertainty makes vulnerable communication riskier and thus leads to less communication, while less communication leads to continued uncertainty. This creates a paradoxical situation for couples: under

conditions of uncertainty, the very communication that could reduce the uncertainty is often avoided (Knight, 2014; Knobloch & Carpenter-Theune, 2004). At the same time, researchers have found that talking about a relationship is most impactful when relationships are new and intimacy is low, because partners do not “have a well-formed definition of the relationship already in place” (Knobloch, Solomon, & Theiss, 2006, p. 216). We propose that DTR talks provide a needed framework for this kind of explicit, mutual conversation about relationship definition and development, thereby reducing uncertainty and reducing the risks in potentially vulnerable communication.

Commitment. Talks to define a relationship are essentially related to the construct of relationship commitment. Modern theories of commitment in relationships have roots in interdependence (Kelley & Thibaut, 1978; Thibaut & Kelley, 1959) and social exchange (Cook & Emerson, 1978; Homans, 1958) theories, and highlight both the benefits (e.g., emotional and instrumental support) and costs (e.g., loss of alternative opportunities) to individuals when forming close relationships with others (Johnson, 1973; Rusbult, 1983; Stanley & Markman, 1992). Current commitment models operationalize these theories by assessing the role of independent driving forces in relationships: forces that create benefit to continuing a relationship, and forces that create a cost to ending a relationship (Stanley & Markman, 1992). These independent – and, at times, opposing – forces help to explain why relationship development often involves distinct choice points or turning points (Baxter & Bullis, 1986), at which time partners decide whether and in what way they want the relationship to continue (Baxter & Erbert, 1999). We contend that the function of a DTR talk is to define what the nature of the

future relationship will be as couples navigate these turning points together. Thus, DTR talks could allow partners to reach shared, mutual decisions about their relationship commitment as they approach important transitions along their relationship development.

This point leads to a question about the importance of explicit communication about commitment. Although communication about commitment has been understudied relative to other commitment processes (Aldrich & Morrison, 2010; O’Riordan, 2007), the extant literature makes clear that the role of commitment in relationships is, at least in part, to communicate one’s relationship intentions to a partner. Stanley, Rhoades, and Whitton (2010) argued that as relationship partners grow more attached to one another and anxiety about the loss of the relationship grows, a primary function of commitment is to reassure each person that the other will continue to be there in the future. Indeed, Eastwick and Finkel (2008) found that attachment anxiety was high for individuals who were unsure about the feelings of a desired relationship partner and subsequently decreased once partners established a mutually committed relationship. Stanley et al. (Stanley et al., 2011) noted that, in order to secure romantic attachment, commitment must be mutual and clearly signaled between partners. Therefore, partners must communicate their commitment to one another in order for it to provide this sense of security and confidence in the relationship. A key function of DTR talks may be to facilitate communication about commitment as partners establish a shared definition of their relationship’s status and future.

Importantly, having a DTR talk in a relationship does not presume any particular level of commitment; rather, we argue that DTR talks could be utilized to establish

relationships along the full continuum of commitment. For example, research on premarital cohabitation suggests that making a serious commitment to the relationship (such as becoming engaged) prior to moving in together helps couples avoid getting stuck in unhappy marriages (Rhoades, Stanley, & Markman, 2009; Stanley, Rhoades, Amato, Markman, & Johnson, 2010; Stanley, Rhoades, & Markman, 2006). On the other side of the commitment spectrum, friends-with-benefits relationships – that is, sexual, nonromantic relationships between friends – can result in disappointment and dissatisfaction if expectations about the future or outcome of the arrangement are not clearly understood by both individuals (Bisson & Levine, 2009; Knight, 2014; Quirk, Owen, & Fincham, 2014). Both of these examples illustrate the importance of communicating about commitment expectations. Thus, DTR talks may be useful both for negotiating transitions into more committed relationships and also for establishing a shared understanding of more casual relationships.

Existing Research

To our knowledge, two existing studies have collected data about DTR talks. Nelms et al. (2010) published initial data on “the talk” from 211 undergraduate students describing the context of and strategies involved in having a relationship-defining conversation. They found that approximately one-third of their participants used a direct question to initiate the talk (e.g., “What do you see as far as the future of this relationship?”; p. 179), and that about half of participants reported that their partner responded to the talk with a clear statement of commitment. Aldrich and Morrison (2010) further described motivations for discussing or not discussing commitment in

relationships among 190 college undergraduates, although they did not use the terminology of “DTR” or “the talk.” They found that approximately 40% of participants discussed commitment in order to define the status of the relationship, and that among those who did not discuss commitment, avoiding embarrassment was the most common reason. From these existing studies, questions remain regarding the prevalence of these kinds of DTR talks, the relationship contexts in which they occur, and their relevance to other populations.

Current Study

The primary goal of the current paper is to explore the characteristics of DTR talks in order to provide a basis for future research on the topic. This paper presents descriptive data about DTR talks from two separate studies using samples from two different populations: an undergraduate university sample and a nationwide online sample of adolescents. Together, these studies provide a foundation of research about how young people use DTR talks in their romantic relationships. Both studies pursued two primary research questions:

RQ1: What are the descriptive characteristics of DTR talks in the romantic relationships of young people?

RQ2: What relationship characteristics are associated with the presence of DTR talks in the romantic relationships of young people?

Study 1

Study 1 was a self-report survey study utilizing a sample of young adult undergraduate students. The aim of this first study was to explore whether individuals did

indeed report engaging in DTR talks as expected based on reviews of both popular culture sources and theoretical research, and to collect preliminary descriptive data about these talks and the relationships in which they occurred. A college convenience sample was chosen for this exploratory study to provide initial data upon which to base Study 2, as well as to connect to the existing literature on early relationship development and ambiguity among college student populations.

Study 1 Method

Participants and procedures. All study procedures were reviewed and approved by a university Institutional Review Board. Participants ($N = 409$) were recruited from an undergraduate psychology subject pool at a mid-size private university in the western U.S., and received a small amount of extra credit for participating. To participate in the study, participants had to report having had at least one romantic relationship and having had sex. Interested participants completed an online survey with questions about their personal characteristics, a current romantic relationship (if applicable), their most recent past romantic relationship, and their first romantic relationship (which typically occurred in adolescence). Fifty-six percent of participants reported a current relationship, 83% reported a previous relationship, and 90% reported on their first relationship. The current study reports data from previous (i.e., most recent past) relationships ($N = 341$). Because these previous relationships had all ended, participants were able to provide complete data about the frequency and timing of DTR talks in their relationships; current relationships were still ongoing at the time of survey completion, making them less ideal to answer the research questions of interest in this study.

Participants were 19.9 years old on average (range 18 to 29, $SD = 1.54$), and most were freshmen (33%) or sophomores (32%). Nine percent of the sample reported a Hispanic or Latino ethnic heritage; among non-Hispanic or Latino participants, 2% reported being African American or Black; 1% American Indian, Native American, or Alaska Native; 6% Asian, Pacific Islander, or Native Hawaiian; 76% Caucasian or White; and 2% reported a different racial identity (e.g., Middle Eastern, Armenian, Persian). Seventy-four percent of participants were female. The vast majority of participants (91%) identified as heterosexual or straight; 3% identified as homosexual, gay, or lesbian; 6% as bisexual, pansexual, fluid, or non-monosexual; and 1% as an ambiguous sexual orientation such as “curious” or “unsure.”

Measures.

Relationship and sexual history. Participants answered a number of face-valid questions about their relationships and sexual history, including how many total relationships they had, how many total sexual partners they had, and how old they were the first time they had sex. In the survey for this study, sex was defined as “vaginal intercourse, anal intercourse, oral sex, or genital touching/rubbing”; this inclusive definition ensured that all potentially risky sexual behaviors were captured and that the sexual behaviors of non-heterosexual participants were accurately assessed.

DTR characteristics. In the study survey, DTR talks were defined for participants using the following description: “‘Defining the relationship’ (also known as DTR) means talking to your partner about the status, rules, or future of your relationship.” Participants were first asked whether they had one or more DTR talks with their previous relationship

partner. If they answered yes, participants were asked to report which partner initiated the DTR talk and how well they thought the DTR talk went on a scale from 1 (Very badly) to 5 (Very well). Participants also completed a checklist indicating which topics they discussed as part of their DTR talk(s). The topic options presented to participants are listed in Table 1; for each topic, participants checked a box to indicate one of the following: “We talked about it and agreed,” “We talked about it but did not agree,” or “We did not talk about it.”

Participant and partner demographics. Participants reported their partner’s gender and age at the time of the start of their previous relationship. Participants’ age at the start of the previous relationship was calculated based on the reported start date of the prior relationship. Age difference between partners was also calculated.

Relationship seriousness and commitment. Several variables captured constructs of relationship seriousness and commitment. Relationship length in months was calculated based on participants’ reports of the month and year the relationship began and ended. Participants selected one of several options describing the seriousness of their relationship: “Friends with benefits”; “Dating casually”; “Dating seriously”; “Engaged”; “Legally married”; “Long-term commitment without legal marriage”; and an option to write in a different description. For analyses, the first two options were coded into a “not serious” category, and the remaining options were coded into a “serious” category. Two questions, one assessing whether participants considered their relationship to be “polyamorous” and one assessing whether they considered it to be “sexually open,”

captured whether the relationship was exclusive; relationships were coded as exclusive if participants reported that their relationship was not polyamorous and not open.

Relationship quality. Relationship quality was assessed with a single item measuring relationship happiness, based on the Dyadic Adjustment Scale (Spanier, 1976): “All things considered, how happy was your relationship with [your partner]?” Answer choices ranged from 0 (Extremely unhappy) to 6 (Perfectly happy).

Sexual functioning and safety. Participants reported whether they had sex with the previous relationship partner (again, defined as “vaginal intercourse, anal intercourse, oral sex, or genital touching/rubbing”). If they answered yes, they answered a series of follow-up questions about sexual satisfaction and safety, including how frequently on a scale from 0 (Never) to 4 (Every time) the couple used condoms, used birth control, had an orgasm (respondent and/or partner), and talked about their sexual likes or wants, with an option to endorse “I don’t know” for these items. Participants also indicated how long in the relationship they waited before having sex, with eight answer choices ranging from “We had sex before we were in a relationship” (coded as 0) to “Longer than 1 year” (coded as 7), and rated their overall sexual satisfaction on a scale from 1 (Very unsatisfying) to 4 (Very satisfying).

Infidelity. To account for diversity in exclusivity agreements, participants were asked about subjective infidelity in the relationship with the question, “Did you or [your partner] do anything that was considered cheating while you were in a relationship together?”

Data analytic plan. Data analyses were completed in SPSS 22. Associations between DTR talks and participant or relationship characteristics were analyzed using analytic methods appropriate for the types of variables involved. The DTR variable was dichotomous, and represented the presence (coded as 1) or absence (coded as 0) of at least one DTR talk in a relationship. When the other variable involved in the analysis was categorical (e.g., gender, relationship exclusivity), chi-square analyses were used. When the other variable was continuous (e.g., age, relationship happiness), t-tests were used. Effect sizes (abbreviated *E.S.* in the text) are also presented to guide interpretation of statistical analyses. For t-tests, Hedge's *g* was used in order to accommodate different sample sizes in DTR versus no DTR groups. For chi-square analyses, Cramer's *V* was calculated in order to accommodate different degrees of freedom across different outcome variables. Because Cramer's *V* (in the correlation family of effect sizes) and Hedge's *g* (in the mean-differences family of effect sizes) are on different scales, values of *V* were converted using an r-to-d transformation ($2*V / \sqrt{1-V^2}$) to facilitate comparison across analyses; all effect sizes use the scale and interpretive guidelines of Cohen's *d* (Cohen, 1988).

Study 1 Results

Participant characteristics. Participants had been in 3.4 total relationships on average. The average number of lifetime sex partners reported was 6.8, but this variable was skewed; it ranged from 1 to 70 with a modal response of 1 (15.2% of the sample) and a median of 5. Participants reported an average age of sexual debut of 16.4; 13% of the

sample reported a sexual debut earlier than a normative time frame, defined as before the age of 15 (Baumgartner, Waszak, Tucker, & Wedderburn, 2009).

Relationship characteristics. On average, participants were 17.8 years old ($SD = 1.9$) and their partners were 18.4 years old ($SD = 2.7$) at the time the previous relationship began. Seventy-two percent of relationship partners were men and 28% were women; 95% of relationships were mixed-gender and 5% were same-gender. These previous relationships lasted 12.0 months on average ($SD = 13.0$), though there was a wide range from under one month to 69 months. Nearly half of participants (47%) described their relationship as “Dating seriously”, and 2% as “Long-term commitment without legal marriage,” whereas 31% described the relationship as “Dating casually,” and 18% as “Friends with benefits”; thus, 49% of relationships were coded as serious and 51% as not serious. The few write-in responses received were coded as serious or not serious on a case-by-case basis; responses of “one night stand” and “hookup” were coded as not serious, responses of “long-term relationship” and “‘unofficially’ dating seriously” were coded as serious, and ambiguous responses such as “on again/off again” were excluded from coding. Seventy-one percent of relationships were exclusive. Previous relationships were moderately happy on average (range = 0 to 6, $M = 3.3$, $SD = 1.5$). Thirty-nine percent of participants reported infidelity in the relationship.

Eighty-eight percent of participants reported having sex with the previous relationship partner. Those participants reported a median of “less than 2 weeks” for how long they waited to have sex in the relationship, although the modal response, given by 34% of participants, was “we had sex before being in a relationship together”. Sexual

satisfaction was fairly high on average (range = 0 to 4, $M = 3.2$, $SD = 0.9$). Median frequency of condom use was “sometimes” (2 on the 0 to 4 scale), frequency of birth control use was “rarely” (1), frequency of orgasm was “often” (3), frequency of partners’ orgasm was “almost every time” (4), and frequency of talking about sexual likes and wants was “often” (3). Unfortunately, a very large proportion of participants gave a response of “I don’t know” for these frequency items: 51% did not know about frequency of condom use, 54% about birth control use, 36% about orgasm, 66% about partner orgasm, and 28% about sexual communication. Because participants who gave responses of “I don’t know” had to be excluded from analyses, analyses regarding frequency of these behaviors would have had an unacceptably large proportion of data missing not at random, resulting in biased estimates (Enders, 2010). Therefore, inferential statistics using these behavioral frequency variables are not reported.

Characteristics of DTR talks. Fifty-seven percent of participants reported having one or more DTR talks in their previous relationship. The majority (62%) of participants indicated that the DTR talk was initiated by both partners equally, whereas 26% reported that they had initiated the talk themselves and 13% reported that their partner had initiated the talk. Participants reported that the talks went moderately well on average ($M = 3.79$, $SD = 0.96$). Frequencies of topics discussed as part of the DTR talks are reported in Table 1. The most commonly discussed topics included “defining us as a couple” (discussed in 98% of DTR talks), the future of the relationship (83%), sexual safety (76% using condoms, 74% using birth control, and 79% sexual histories), and romantic (76%) and sexual (71%) exclusivity. The most frequently disagreed upon topic

was the future of the relationship, with approximately one-fourth of those who reported discussing it indicating that they disagreed with their partner.

Associations between personal characteristics and DTR talks. Table 2 shows results from t-tests (for continuous measures) and chi-square tests (for categorical measures) used to investigate the association between participants' reported demographic and personal characteristics and whether participants reported having a DTR talk in their previous relationship. Demographic factors of age, sex, and sexual orientation were not associated with the likelihood of having a DTR talk (all $ps > .3$). Similarly, relationship history variables including age of sexual debut, total number of sexual partners, and total number of relationships were not significantly associated with the likelihood of having a DTR talk (all $ps > .6$).

Associations between relationship characteristics and DTR talks. Table 3 shows results from t-tests (for continuous measures) and chi-square tests (for categorical measures) used to investigate the association between reported relationship characteristics and whether participants reported having a DTR talk in previous relationships.

Age and gender. Gender of the partner and gender composition of the relationship were not significantly associated with whether participants reported having a DTR talk ($ps > .14$). DTR talks were marginally related to partner age ($t(334) = -1.946, p = .053; M_{DTR} = 18.1, M_{NO} = 18.7; d = .22$) and significantly associated with age difference between partners, with larger age differences among those who did not have DTR talks ($t(303) = -2.084, p = .038; M_{DTR} = 5.2$ months, $M_{NO} = 10.4$ months; $d = .24$).

Commitment and satisfaction. Having a DTR talk was associated with all three indices of more committed relationships, with medium to large associations ($E.S. = .48$ to $.83$): relationships that involved DTR talks were longer on average ($t(315) = 4.192, p < .001$; $M_{DTR} = 14.6$ months, $M_{NO} = 8.6$ months) and more likely to be serious ($\chi^2(1, N = 338) = 49.9, p < .001$; DTR talks occurred in 76% of serious relationships and 38% of non-serious relationships) and exclusive ($\chi^2(1, N = 341) = 27.6, p < .001$; 66% of exclusive relationships and 35% of non-exclusive relationships had DTR talks). However, relationship happiness was unrelated to likelihood of a DTR talk ($p > .7$).

Sexual functioning. Results related to sexual functioning were mixed. Relationships that included DTR talks were more likely to involve sex ($\chi^2(1, N = 339) = 5.3, p = .021$; DTR talks were reported by 59% of those who had sex in their relationship compared to 41% of those who did not), but participants in relationships involving a DTR talk also significantly delayed sex compared to relationships without DTR talks ($t(292) = 3.221, p < .001$; $M_{DTR} = 3.81, M_{NO} = 2.95$). These effects were small ($E.S. = .25$ and $.38$, respectively). DTR talks were not associated with sexual satisfaction ($p > .2$).

Infidelity. A small effect ($E.S. = .27$) indicated that infidelity was more frequent in previous relationships that involved a DTR talk ($\chi^2(1, N = 303) = 5.341, p = .021$); infidelity occurred in 67% of relationships with a DTR talk and 53% of relationships without a DTR talk.

Study 1 Discussion

Study 1 demonstrated that DTR talks appear to be prevalent in young adults' romantic relationships, and as theorized, typically involved establishing the existence of a

romantic relationship with a future and specific expectations about fidelity (i.e., commitment). Young adults also used DTR talks to discuss sexual features of their relationship, including sexual safety and histories. For the most part, DTR talks did not appear to be related to the characteristics of the individuals in the relationship, but rather to certain relationship characteristics; in particular, DTR talks tended to occur in relationships that were more seriously committed. DTR talks were not related to young adults' reported sexual satisfaction. However, participants who had DTR talks did tend to delay sex until longer in the relationship, which may suggest that DTR talks could be related to making more thoughtful decisions about sex.

Unfortunately, many participants reported that they did not know the answers to questions about frequency of contraception use or other sexual behaviors, precluding statistical analyses using these variables. We are not aware of any reason that young adults should not be able to self-report their sexual behaviors. It may be the case that participants could not remember the specific sexual behaviors that occurred in their past relationships, although the relationships were recent enough (within the past two years, on average) that this explanation seems unlikely. It may also be the case that data collection in the university setting discouraged these participants from answering these questions honestly. Whatever the reason, future research on this topic should work to ensure that accurate estimates of the frequency of sexual behaviors are collected.

The finding that participants whose relationships involved DTR talks were more likely to report infidelity was unexpected, and challenged our conceptualization of the DTR talk as an unequivocally healthy romantic relationship process. In some cases,

young adults may use DTR talks to address a problem or perceived violation in the relationship. For example, some couples may not feel a need to define their relationships until after one partner engages in behavior that the other considers to be cheating, at which point it may become apparent that explicitly defining the relationship's terms and commitment is necessary. Still, it is unclear whether the DTR talk itself has a helpful or harmful function in relationships that involve these types of problems. Additional research on the motivations for DTR talks would be helpful to help shed light on when, why and how young people use DTR talks in their relationships. Further, more research is needed on the changes that occur in relationships after DTR talks in order to better understand whether DTR talks have a beneficial impact.

Although this study provides helpful preliminary data that describe DTR talks, it is limited by the use of a non-representative convenience sample, and it leaves some unanswered questions regarding motivations for and impacts of DTR talks. Study 2 was designed to improve upon the sampling procedures, to extend the research questions to an adolescent sample, and to collect data on additional aspects of DTR talks not included in Study 1.

Study 2

Adolescence provides a salient context for the study of DTR talks. Romantic relationships are a normative and important part of adolescent development (Carver, Joyner, & Udry, 2003; Collins, Welsh, & Furman, 2009), providing key experiences for the development of skills and expectations for relationships throughout the life course (Furman & Shaffer, 2003; Seiffge-Krenke, 2003). Adolescent relationships demonstrate

significant developmental continuity with young adult relationships (Madsen & Collins, 2011; Meier & Allen, 2009; Raley, Crissey, & Muller, 2007), and adolescents experience many of the same relationship challenges as young adults: relationship choice and complexity are increasing, and with them, demands for more sophisticated relationship skills (Larson et al., 2002). Further, adolescent romantic relationships tend to lack clearly defined types or stages and are increasingly characterized by ambiguity (Rowley & Hertzog, 2016; Shulman & Connolly, 2013). Relationship ambiguity has the potential to be harmful, because it may cause different expectations between partners about relationship commitment and boundaries that can lead to conflict or even violence (Draucker, Martsof, & Stephenson, 2012; Stanley et al., 2017). Finally, teens are a population for whom the stakes of sexual health are particularly high (CDC, 2014a, 2014b; Chesson, Blandford, Gift, Tao, & Irwin, 2004; Perper, Peterson, & Manlove, 2010; The National Campaign, 2015), making the adolescent perspective an important window into answering the questions regarding connections between DTR talks and sexual health left open by Study 1.

For these reasons, Study 2 extended the investigation of DTR talks to an adolescent sample and made several changes to improve the quality of data collected compared to Study 1. First, a nationwide sample was recruited, and quota sampling helped to improve the gender distribution of participants. Second, recruitment and data collection procedures were conducted online and were not connected to participants' schools or other aspects of their personal lives, with the aim of enhancing participants' sense of privacy and improving their ability to give candid responses regarding their

romantic and sexual behavior. Third, the survey utilized a mixed-methods approach, collecting both quantitative and qualitative data in order to better examine participants' perceptions of their use of DTR talks. Last, several measures about identity, relationship commitment, and sexual behavior were adapted to be more appropriate for teen relationships, as described in the following sections.

Study 2 Method

Participants and procedures. All study procedures were reviewed and approved by the Institutional Review Board at the authors' university. Participants were recruited via a Facebook advertisement targeted toward teens between ages 15 and 17 in the U.S. Quota sampling was used to help ensure equitable gender distribution of the sample; the enrollment of female participants was reached first, after which point the survey was closed to additional enrollment of female participants and the Facebook advertisements were targeted specifically toward males. In order to be eligible to participate in the research study, participants had to report being between the ages of 15 and 17 years old, and either a) having been in at least one romantic relationship, or b) having had at least one sexual experience. In addition to these eligibility criteria, interested participants had to pass a quiz in two tries that confirmed their understanding of the assent form. This resulted in a final sample of 435 participants who were eligible and completed the study survey. Nearly all (434) participants reported having been in a romantic relationship; 70% reported having had sex. Importantly, this study was approved with a waiver of parental consent by the university Institutional Review Board, meaning that parent

approval or permission did not influence study sampling. Further, participants' names and other personally identifiable information were not collected.

Similar to Study 1, participants completed an online survey with questions about their personal characteristics, a current romantic relationship (if applicable), and their most recent past romantic relationship; given the younger age and presumably shorter relationship histories of this adolescent sample, the survey did not separately ask about participants' first romantic relationships. Eighty percent of participants reported a previous relationship and 65% reported a current relationship; 46% reported both a current and a previous relationship. As in Study 1, we report data from previous relationships ($N = 248$), which had ended by the time of Study 2 data collection.

All participants were between 15 and 17 years old ($M = 16.1$, $SD = 0.8$). Five percent of participants reported being in 9th grade, 28% in 10th grade, 38% in 11th grade, 27% in 12th grade; 1% reported being college freshmen, and 1% were not in school. Sixteen percent of the sample reported a Hispanic or Latino ethnic heritage; among non-Hispanic or Latino participants, 6% reported being African American or Black; 5% American Indian, Native American, or Alaska Native; 10% Asian, Pacific Islander, or Native Hawaiian; 72% Caucasian or White; and 2% reported a different racial identity (e.g., Middle Eastern, Iranian, North African). Fifty-nine percent of the sample reported their biological sex (i.e., sex assigned at birth) as female and 41% as male; one participant reported an intersex biological sex. Self-identified gender was also assessed, and 50% percent of the sample identified as a girl, 41% as a boy, and an additional 9% of participants identified as exclusively nonbinary (i.e., they only reported having a

transgender, genderqueer, genderfluid, or other nonbinary gender identity, and did not also identify as a boy or a girl). Fifty-one percent of the sample identified as heterosexual or straight; 29% as bisexual, pansexual, fluid, or non-monosexual; 12% as homosexual, gay, or lesbian; 4% as asexual; and 4% as another sexual orientation (e.g., hetero/homoflexible, hetero/homoromantic, questioning).

Measures.

Relationship and sexual history. Participants in Study 2 answered the same questions about sexual and relationship history as in Study 1.

DTR characteristics. The quantitative measures used to assess characteristics of DTR talks were the same as in Study 1, with a few additions to improve data quality. In Study 2, participants also reported how many times a DTR talk occurred in the relationship, how long they had been with the previous partner before having a DTR talk (seven response choices ranging from “Right Away” to “Longer than 1 Year”), and the modalities of communication used to have the DTR talk (e.g., face to face; Skype/FaceTime; talking on the phone; over text message/IM). Participants also indicated whether their relationship changed after having a DTR talk and rated how worried or anxious they felt before having the talk on a scale from 0 (None) to 2 (A Lot). Finally, because many teen relationships do not involve sexual activity, the topic “Whether we would have sex” was added to the checklist of DTR topics discussed.

Study 2 also added questions to explore participants’ reasons for not having a DTR talk. If participants reported they did not have a DTR talk in the relationship, they were asked whether they wanted to have a DTR talk (including an option for “I wasn’t

sure”). They were also asked to endorse items from a checklist of reasons they did not have a DTR talk, including: “I didn’t know how to bring it up”; “[My partner] didn’t want to talk about it”; “I was worried about [my partner’s] reaction”; “I was worried about the outcome of the talk”; “I don’t think couples should have DTR talks”; and an option to write in a different reason.

In Study 2, participants were asked open-ended, qualitative questions about the DTR talks in their relationship. They described their motivations for having a DTR talk in response to the prompt, “How did you decide whether to have a DTR talk with [your partner]? Please describe how you reached this decision or why the talk came to happen.” Participants described their perception of any changes in the relationship after having a DTR talk in response to the prompt, “If your relationship with [your partner] changed after having a DTR talk, please describe how it changed.” For both of these items, participants were provided an unlimited text box to type in any response they wanted.

Relationship characteristics. Participants in Study 2 answered the same questions as in Study 1 about their relationships, with a few changes. The exclusivity measure was simplified to ask, “In your relationship with [your previous partner], did you expect that both of you should not have any other romantic or sexual partners?” Participants also reported whether they celebrated an anniversary with their partner as an additional measure of commitment for very young couples.

Data analytic plan. Quantitative data analyses used the same approach as in Study 1. Perhaps because of the somewhat smaller sample size in Study 2, heterogeneity of variances was often observed across DTR groups. Thus, the Levene test for equality of

variances was performed for each outcome tested, and in cases when the Levene test was significant, the t-test for unequal variances was used and corrected degrees of freedom are presented in place of traditional degrees of freedom.

Each of the two qualitative items in Study 2 was coded using a thematic analysis approach that used three major steps: generating themes, coding responses, and double-coding for reliability. To generate themes, the research team (consisting of the principal investigator and student research assistants) first independently read each of the participants' typed responses to the item. Each researcher then generated a list of themes describing the major patterns and ideas that emerged from the responses. The research team met to compare theme lists and to reconcile them into a final coding reference document. These final themes were informed by the first author's theories about the functions of DTR talks to reduce relationship ambiguity and clarify commitment, but this process also allowed new, unanticipated themes to arise from the data. Next, student research assistants coded each response one by one into the theme(s) that fit the response. Responses were coded nonexclusively; that is, each response could fit as many or as few themes as were appropriate. When research assistants were uncertain about a coding decision, they met with the first author and made a final coding decision collaboratively. After all responses were coded, the first author used SPSS 22 to randomly select 20% of the responses for double-coding. A different research assistant then coded those selected responses again, using the same themes but without seeing the original codes. Reliability for the double-coded responses was calculated as percent agreement across each theme for each response.

Study 2 Results

Participant characteristics. The majority of participants in the adolescent sample reported having been in only one (28%) or two (32%) romantic relationships in their lives. Seventy-one percent of participants reported that they have had sex (again, defined as “vaginal intercourse, anal intercourse, oral sex, or genital touching/rubbing”). Twenty-five percent of the sample reported an early sexual debut. The average number of lifetime sex partners reported was 2.5, but this variable was again highly skewed, ranging from 1 to 17 with a modal response of 1, with 49% of participants who reported having had sex reporting only one sex partner.

Relationship characteristics. On average, participants were 14.6 years old ($SD = 1.8$) and their partners were 15.2 years old ($SD = 1.8$) at the time the previous relationship began. Fifty-four percent of relationship partners were boys, 41% were girls, and 5% had trans or nonbinary gender identities; 75% of relationships were mixed-gender and 19% were same-gender. These previous relationships lasted 7.6 months on average (range <1 to 48 months, $SD = 8.5$). The majority of participants (51%) described the relationship as “Dating casually,” with an additional 10% endorsing “Having sex but not in a romantic relationship”; 35% described it as “Dating seriously,” and less than 1% as “Long-term commitment without legal marriage,” or “Engaged”. There were 7 additional write-in responses, which were coded as serious or not serious on a case-by-case basis. In total, 37% of relationships were coded as serious and 63% as not serious. The vast majority (83%) of relationships were exclusive. Previous relationships were moderately happy on

average (range = 0 to 6, $M = 3.0$, $SD = 1.5$). Forty-three percent of participants reported infidelity in the relationship.

Forty-four percent of participants reported having sex with the previous relationship partner. Those participants reported a median of “2 to 4 weeks” for how long they waited to have sex in the relationship, and reported relatively high sexual satisfaction on average (range = 1 to 4, $M = 3.0$, $SD = 0.9$). Median frequency of condom use was “rarely” (1), frequency of birth control use was “never” (0), frequency of orgasm was “sometimes” (2), frequency of partners’ orgasm was “most of the time” (3), and frequency of talking about sexual likes and wants was “sometimes” (2). In contrast to Study 1, very few participants responded, “I don’t know” to these frequency items; fewer than four participants gave that response on all items except frequency of partner orgasm, which was reported as unknown for 11 participants.

Characteristics of DTR talks. Fifty-seven percent of participants reported having a DTR talk in their previous relationship. Of those participants, 43% reported having just one DTR talk in the relationship; 28% reported two, 12% reported three, and 17% reported more than three, with common descriptive responses including “regularly,” “whenever needed,” and “a lot.” In terms of timing, the majority of participants reported that DTR talks occurred within the first month of a relationship; 22% reported having a DTR talk right away, 29% in less than two weeks, and 22% between two weeks and one month. Most participants had these DTR talks face-to-face with their partners (63%), with many also utilizing text messages (47%); fewer participants used video chat (17%), phone calls (16%), or social media (9%). Forty-six percent of participants reported they

had initiated the DTR talks themselves, 39% reported that the talks were initiated by both partners equally, and 15% indicated that their partner initiated the talks. Participants rated moderate worry before having a DTR talk; on a scale from 0 to 2, the mean was 1.00 ($SD = 0.62$), anchored at “some” worry. Participants also rated that the talks went moderately well on average ($M = 3.55$, $SD = 1.10$). Further, 49% of participants reported that their relationship improved following the talk, whereas 21% reported that the relationship got worse and 30% reported no change following the DTR talk.

Frequencies of topics discussed in DTR talks are reported in Table 4; the most commonly discussed topics included “defining us as a couple” (96%), the future of the relationship (80%), sexual or romantic histories (74%), whether couples planned to have sex (73%), and whether partners would also date other people (70%). The most frequently disagreed upon topic was the future of the relationship, with more than one-third of participants who discussed it reporting that they disagreed with their partner.

Of respondents who reported that they did not have a DTR talk in their previous relationship, 42% were not sure whether they wanted to have a DTR talk, 35% reported that they did not want to have one, 23% reported that they did want to. When asked to select the reason(s) that participants did not have a DTR talk, the most frequently endorsed reason was “I didn’t know how to bring it up” (40%), followed by “I was worried about the outcome of the talk” (21%), “I was worried about [my partner’s] reaction” (12%), and “[My partner] didn’t want to talk about it” (10%). Only 9% of participants endorsed the reason, “I don’t think couples should have DTR talks.” Many participants (38%) wrote in additional open-ended responses to this question, indicating

that the pre-populated answer choices did not fully capture their reasons for not having a DTR talk; these write-in responses indicated reasons including not being sure of what the respondent wanted in the relationship, the DTR talk being unnecessary because commitment was implied, and the relationship being too casual to warrant a DTR talk.

Associations between personal characteristics and DTR talks. Table 5 shows results from t-tests (for continuous measures) and chi-square tests (for categorical measures) used to investigate the association between participants' reported demographic and personal characteristics and whether participants reported having a DTR talk in their previous relationship. Demographic factors of age, gender, birth sex, and sexual orientation all showed no significant associations with having a DTR talk. Similarly, relationship history variables including being sexually active, age of sexual debut, total number of sexual partners, and total number of relationships were not significantly associated with the likelihood of having a DTR talk.

Associations between relationship characteristics and DTR talks. Table 6 shows results from analyses of associations between reported relationship characteristics and whether participants reported having a DTR talk in previous relationships.

Age and gender. Compared to those who reported they did not have a DTR talk in the previous relationship, participants who had a DTR talk were significantly older at the time the relationship began ($t(257.5) = 4.146, p < .001; M_{\text{DTR}} = 14.9, M_{\text{NO}} = 14.3$) and reported having a significantly older relationship partner ($t(313) = 4.055, p < .001; M_{\text{DTR}} = 15.6, M_{\text{NO}} = 14.8$). Age difference between partners and partner gender were not associated with DTR talk likelihood ($p > .1$).

Commitment and satisfaction. DTR talks were not associated with relationship length ($p > .09$), but they were significantly associated with several other measures of relationship commitment. Seventy-eight percent of serious relationships involved a DTR talk, whereas only 46% of non-serious relationships did ($\chi^2 (1, N = 307) = 31.042, p < .001$). DTR talks were also associated with marking an anniversary in the relationship ($\chi^2 (1, N = 317) = 12.856, p < .001$; DTR talks were reported by 72% of participants who celebrated an anniversary and 50% of participants who did not) and with exclusivity ($\chi^2 (1, N = 316) = 7.010, p = .008$; 60% of exclusive relationships and 41% of non-exclusive relationships included a DTR talk). DTR talks were also associated with happier relationships on average ($t(315) = 4.146, p = .011$; $M_{\text{DTR}} = 3.16, M_{\text{NO}} = 2.74$). Effect sizes in this domain ranged from small (.20 to .30) for happiness and exclusivity to medium (.41 to .49) for respondent and partner age and celebrating an anniversary. The largest association (.68, in the medium-to-large range) was seen for relationship seriousness.

Sexual functioning. Participants who reported having a DTR talk in their previous relationship tended to report engaging in healthier and safer sexual behaviors. A small, marginally significant effect indicated that DTR talks were more frequently reported by participants who had sex in with their previous relationship partner (63% had DTR talks) compared to those who did not have sex (51% had DTR talks; $\chi^2 (1, N = 311) = 3.812, p = .051$). This result may be interpreted to indicate that DTR talks were associated with less sexual safety, as the talks were positively associated with teens having sex. At the same time, among participants who had sex in their previous relationships, those who reported having a DTR talk significantly delayed sex compared

to those who did not have a DTR talk ($t(134) = -3.159, p = .002; M_{DTR} = 4.21, M_{NO} = 2.98$) and reported significantly more frequent use of condoms ($t(109.7) = 2.482, p = .015; M_{DTR} = 1.92, M_{NO} = 1.16$) and contraception ($t(116.0) = 2.143, p = .034; M_{DTR} = 1.28, M_{NO} = 0.67$). Further, those who had DTR talks reported significantly higher sexual satisfaction ($t(92.7) = -2.450, p = .016; M_{DTR} = 3.17, M_{NO} = 2.76$) as well as more frequent orgasms ($t(131) = -2.333, p = .021; M_{DTR} = 2.22, M_{NO} = 1.57$) and a higher frequency of talking to their partner about sexual likes and desires ($t(133) = -3.080, p = .003; M_{DTR} = 2.70, M_{NO} = 2.00$). Effects for these sexual functioning variables were all in the medium range (.37 to .56), with the largest effects found for timing of sex and talking about desires.

Infidelity. Replicating the unexpected finding in Study 1, a small effect indicated that infidelity was more likely in previous relationships that involved a DTR talk ($\chi^2(1, N = 311) = 6.19, p = .013$; infidelity occurred in 40% of relationships with a DTR talk and 26% of relationships without a DTR talk).

Qualitative results.

Motivations for DTR talks. Themes describing motivations for DTR talks and percentage of responses fitting each theme are shown in Table 7. There was 85% agreement across double-coding for these themes, demonstrating acceptable reliability. The most common theme described proactive motivations for wanting to have a DTR talk (33% of responses). This theme captured participants' intentions to use the DTR talk to anticipate or plan ahead for the future, such as maintaining a strong relationship or avoiding conflict in the future. For example, one participant described their motivations

this way: *“We knew our feelings were serious and we needed to address our expectations.”* Another participant described proactively addressing expectations about sex: *“I wanted to make sure we were on the same page so no one would be uncomfortable when it got to the sexual stuff in the relationship.”* Nearly as common, the theme of natural and spontaneous DTR talks (30%) described a very different approach to DTR talks than the intentional and planful theme described previously. For example, one response in this theme described the talk arising naturally from a different conversation: *“...there wasn’t much forethought. I was worried about my future and how he fit into it (and how I fit into his plans for the future) and as I was venting to him about it the talk sort-of came naturally.”* The theme of resolving ambiguity about the relationship emerged in 27% of responses, as exemplified by this quote: *“She was the one to bring it up first, and it was because she was confused as to what we were at the time. We liked each other and knew it but didn’t make it official until after that talk.”* A theme describing clarifying or establishing commitment described 21% of responses. For many participants, responses in this theme involved establishing exclusivity: *“I wanted to make sure he was not having sex with several other girls, did not want an increased chance of an STI.”*

Changes after DTR talks. Themes describing motivations for DTR talks and percentage of responses fitting each theme are shown in Table 8. There was 93% agreement across double-coding for these themes, demonstrating acceptable reliability. The most common theme was that clarity about the relationship increased, with 30% of responses fitting that theme. For example, one participant described, *“We both felt some*

clarity about our relationship because of the talk and it helped us know who we are as a couple and what we expect from each other.” In some cases, this clarity demonstrated to partners that they were on the same page about their relationship, as in this response: *“Well we flirt w each other a lot even though we’re just friends but after defining the fwb [friends-with-benefits] situation, it stopped feeling like mixed signals and stuff and it felt normal and fun.”* In other cases, the increased clarity helped participants to understand that they wanted something different than their partner: *“He wanted more sexual activity in the relationship that i wasn’t ready for.”* Twenty percent of responses described that participants experienced increases in closeness or intimacy (e.g., *“It just made us closer as a couple and trust each other more and know where it was all going for us.”*), and 19% described increases in commitment (e.g., *“We got closer because we felt like we were in it for the long run.”*). In contrast to these positive outcomes, nearly one-fourth of responses indicated some kind of dissatisfaction with the outcome of the DTR talk, as demonstrated by this quote: *“It’s drove a wedge between us and we would always fight if it came back up.”*

Study 2 Discussion

The results from Study 2 indicate that DTR talks appear to be common in adolescents’ romantic relationships. Most participants first had DTR talks relatively early on in their relationships, within the first month, and over half reported multiple different DTR talks. Most DTR talks included establishing the nature and future of the relationship, with just under three-fourths of participants also discussing relationship histories, whether they wanted to have sex, and being exclusive.

Participants expressed moderate worry about having a DTR talk, and of those who did not have a DTR talk in their relationship, many wanted to but did not know how to bring it up. In contrast, a substantial minority of participants reported that they did not want to have a DTR talk, because they did not see a need or did not know how they wanted to define the relationship. At the same time, when participants did engage in DTR talks, they reported that the talks went fairly well, and only one-fifth of participants reported negative changes in the relationship following DTR talks. Qualitative data about changes after DTR talks suggest themes that are consistent with our conceptualization of DTR talks as a way of resolving ambiguity or uncertainty, especially about commitment. Many participants also reported improvements in relationship quality and intimacy following the talk, suggesting that DTR talks may themselves be relationship enhancing, which is consistent with literature on talking about one's relationship as a relationship enhancement strategy (Acitelli, 2008; Markman, Stanley, & Blumberg, 2010).

Findings from Study 2 indicated that DTR talks were associated with several measures of safer sex behaviors, including delaying sex and using condoms and/or birth control. This is a key outcome for an adolescent population, and is consistent with our proposal that DTR talks may contribute to thoughtful and healthy decisions during the course of relationship development for young couples.

In contrast to these generally positive results, DTR talks were again associated with increased rates of infidelity. Puzzlingly, renegotiating a relationship after infidelity was almost never mentioned in qualitative data about teens' motivations for DTR talks.

Because participants were not asked directly about infidelity-related motivations for DTR talks, why and how DTR talks are related to infidelity remains unclear.

Discussion

Findings from these two studies provide preliminary data demonstrating that the majority of adolescent and young adult relationships involve having some kind of DTR talk at some point, and that these conversations are related to important relationship qualities including commitment and sexual behavior. Further, in Study 2, most adolescent participants reported positive changes in the relationship following DTR talks, many of which were related to improving clarity, quality, or commitment in the relationship. These findings are important because they suggest that DTR talks have the potential to be a useful strategy for young people to reduce relationship ambiguity and navigate decisions about commitment, which is an increasingly difficult and complex task for both young adults and adolescents. These results provide a conceptual and empirical foundation for future work to test the impact of engaging in DTR talks as a relationship skill.

Data from both studies suggested that one key function of DTR talks may be elucidating relationship commitment, consistent with our theoretical framework. In both Study 1 and Study 2, the most commonly discussed topics in DTR talks were defining a couple status and discussing the future of the relationship, both of which capture the sense of commitment as “us with a future” (Stanley, Rhoades, & Whitton, 2010, p. 244). Qualitative data from Study 2 support this idea, with over half of participants describing motivations for DTR talks related to either explicit discussion of commitment or

decisions about the future of the relationship, and one-third of participants describing commitment-related impacts of a DTR talk. Additionally, in both studies, participants who had DTR talks were more likely to be in serious and exclusive relationships than participants who did not have a DTR talk. Although our conceptualization of the DTR talk does not necessarily require that the talk be used to establish a committed, rather than casual, relationship, these results suggest that DTR talks are significantly more likely to occur in relationships that are more seriously committed. Theoretically, DTR talks should also be important in establishing less committed relationships, but these data suggest that those uses are less common; the utility of DTR talks in contexts of lower commitment remains an important area for future study.

At the same time, one surprising finding from this project called into question our conceptualization of the DTR talk as a proactive way of addressing commitment: in both studies, cheating was more frequently reported in relationships that involved DTR talks compared to relationships that did not involve DTR talks. These results are at odds with other results that suggested DTR talks were associated with many different indices of better relationship quality. One possible explanation is that in some cases, individuals may initiate DTR talks with their partners as a way of repairing and renegotiating a relationship after experiencing a problem or violation, such as infidelity. Some of the qualitative data from Study 2 support this conceptualization, with 16% of participants reporting that they were motivated to have a DTR talk in reaction to a relationship event; however, almost no participants mentioned infidelity directly in their open-ended responses about motivations for DTR talks. These two studies do not provide data that

can speak to whether infidelity occurred before or after the DTR talk, or whether participants would have agreed that infidelity played a role in spurring DTR talks if they had been asked directly. More research is needed to identify whether different types of DTR talks may exist (e.g., proactive versus reactive DTR talks; talks to establish commitment versus talks to resolve a dispute about commitment). Alternatively, it may be the case that individuals who had DTR talks had higher fidelity expectations for their relationships than participants who never had a DTR talk with their partner, making them more likely to label their partners' extradyadic behavior as infidelity.

An important set of the current findings highlights the potential implications of research on DTR talks for sexual health, especially among adolescents. In both studies, participants who had DTR talks in their relationships significantly delayed sex in the relationship. Waiting longer in the relationship before having sex is associated with more positive sexual experiences (Smiler, Ward, Caruthers, & Merriwether, 2005), and may suggest more deliberative rather than impulsive decision-making about having sex. Study 2 also showed that having a DTR talk was associated with more frequent sexual communication, which is often linked with better sexual health (Widman, Noar, Choukas-Bradley, & Francis, 2014). Importantly, safer sex behaviors – condom and birth control use – were both more frequently reported by adolescents who had engaged in DTR talks. This finding is especially important given the overall low rates of condom and birth control use among adolescents. Because we could not analyze the safer sex behavior data from the Study 1 sample, further research is needed to determine whether similar associations would be found among young adults.

Although some differences in results emerged between the young adult and adolescent samples, results from both studies were remarkably similar on the whole. One important contribution of this paper is studying the same romantic relationship phenomena across both adolescence and early adulthood. The majority of the published literature on both relationships and sexual behavior has considered adolescents and young adults separately, which may limit our understanding of important similarities and may not accurately reflect the experiences of young people as they transition from teens to young adults (e.g., in the U.S., from high schoolers to college students). Further, obtaining similar results from two separate samples – who were demographically dissimilar and were recruited using different methods – provides some degree of replication to reinforce the legitimacy of the DTR construct, although additional research is certainly needed before the implications of DTR talks for relationships can be fully understood.

Although the findings from the current studies are largely consistent with our initial conceptualization of the DTR talk as a relational strategy for reducing ambiguity or uncertainty about relationship commitment, there is still much that remains unknown about the DTR talk as a psychological construct. For example, to what extent is a “defining the relationship” talk distinct from other forms of relational communication? In the current studies, individuals who reported having DTR talks in their relationship also reported greater frequency of other types of communication with their partner, such as sexual communication. It is possible that DTR talks are simply part of the communication that occurs over the course of a relationship rather than a fundamentally different

relationship process. Further, participants reported a wide range of topics discussed as part of their DTR talks, and a similarly broad set of motivations for initiating DTR talks. It remains a topic for future research to examine whether a DTR talk is a single, unified construct, or whether it would be more accurate to consider each different type of decision (e.g., whether to be exclusive; expectations for the future) as a distinct process. These questions have important implications for how DTR talks might be most effectively understood and utilized in the relationships of young people and in future relationship education programs.

Limitations

This paper provides an important conceptual and empirical foundation for research on the existence and use of DTR talks in the romantic relationships of young adults and adolescents. Nonetheless, the two studies in this paper have limitations that are important to consider. First, both studies used retrospective survey data, which establishes cross-sectional associations but is less useful for exploring how these relationship dynamics unfold over time. Given our conceptualization of the DTR talk as an important part of relationship development over time, future research should consider the use of longitudinal methods. Dyadic or observational data would also contribute additional information about the function of DTR talks beyond the self-report data included here. Second, sample sizes are relatively small in both studies, which may result in low power for inferential statistics. Because questions about DTR talks have not yet been included in larger-scale studies of young people's relationships, it is our hope that

the current study will provide a rationale for other researchers to consider assessing the use of DTR talks in future studies.

Table 2.1

Study 1: Topics discussed in DTR talks in young adults' most recent relationships.

	Agreed	Disagreed	Did Not Discuss
Defining us as a couple or in a relationship together	82%	16%	2%
Talking about our future	59%	24%	17%
Dating other people (being romantically exclusive)	66%	10%	24%
Having sex with other people (being sexually exclusive)	64%	7%	28%
What we considered to be cheating	50%	7%	42%
Using condoms together	71%	5%	23%
Preventing pregnancy	70%	4%	26%
What would happen if either of us got an STD or STI	36%	1%	63%
What would happen if we got pregnant	43%	9%	48%
Our sexual or romantic histories	69%	10%	21%
Whether we had STDs or STIs	62%	1%	37%
Other	30%	4%	65%

Table 2.2

Study 1: Associations between young adults' demographic and personal characteristics and the likelihood of having a DTR talk in the previous relationship.

	<i>N</i>	<i>t(df) /</i> <i>χ²(df)</i>	Group Descriptives	<i>E.S.</i>	<i>p</i>
Age	324	0.874(322)	$M_{DTR} = 20.0; M_{NO} = 19.8$	.10	.383
Sex	341	3.349(1)	Girl: 60%; Boy: 49%	.20	.302
Sexual orientation	340	0.393(2)	Heterosexual/Straight: 58%; Homosexual/Gay/Lesbian: 50%; Bisexual/Pansexual: 53%	.07	.822
Age of sexual debut	340	-0.494(338)	$M_{DTR} = 16.24; M_{NO} = 16.34$	.04	.622
Number of sex partners	339	0.500(337)	$M_{DTR} = 7.58; M_{NO} = 7.13$	.05	.618
Number of relationships	340	-0.223(338)	$M_{DTR} = 3.67; M_{NO} = 3.73$	.02	.824

Note: For continuous variables, M_{DTR} denotes mean scores for those who had a DTR talk, and M_{NO} denotes mean scores for those who did not. For categorical variables, the percentage of participants who had a DTR talk is reported for each category. E.S. = effect size.

Table 2.3

Study 1: Associations between young adults' previous relationship characteristics and the likelihood of having a DTR talk in the previous relationship.

	<i>N</i>	<i>t(df) / χ²(df)</i>	Group Descriptives	<i>E.S.</i>	<i>p</i>
Partner age	336	-1.946(334)	$M_{DTR} = 18.10; M_{NO} = 18.68$	.22	.053
Respondent age	306	-0.878(304)	$M_{DTR} = 17.72; M_{NO} = 17.92$	.10	.381
Age difference	305	-2.084(303)	$M_{DTR} = 5.15; M_{NO} = 10.43$	.24	.038
Partner sex	338	2.135(1)	Female: 51%; Male: 60%	.16	.144
Gender composition	338	1.304 (1)	Same: 44%; Mixed: 58%	.12	.253
Relationship length	317	4.192(315)	$M_{DTR} = 14.64; M_{NO} = 8.58$	.48	<.001
Relationship seriousness	338	49.928(1)	Serious: 76%; Not: 38%	.83	<.001
Exclusivity	341	27.630(1)	Yes: 66%; No: 35%	.59	<.001
Relationship happiness	341	0.319(339)	$M_{DTR} = 3.35; M_{NO} = 3.29$	.04	.750
Sex in relationship	339	5.295(1)	Yes: 59%; No: 41%	.25	.021
Timing of sex	294	3.221(292)	$M_{DTR} = 3.81; M_{NO} = 2.95$	.38	.001
Sexual satisfaction	291	1.107(289)	$M_{DTR} = 3.29; M_{NO} = 3.17$	.13	.269
Cheating	303	5.341(1)	Yes: 67%; No: 53%	.27	.021

Note: For continuous variables, M_{DTR} denotes mean scores for those who had a DTR talk, and M_{NO} denotes mean scores for those who did not. For categorical variables, the percentage of participants who had a DTR talk is reported for each category. E.S. = effect size.

Table 2.4

Study 2: Topics discussed in DTR talks in adolescents' most recent relationships.

	Agreed	Disagreed	Did Not Discuss
Defining us as a couple or in a relationship together	79%	17%	4%
The future of our relationship	52%	28%	20%
Dating other people (being romantically exclusive)	60%	11%	30%
Having sex with other people (being sexually exclusive)	47%	9%	44%
What we considered to be cheating	33%	14%	53%
Whether we would have sex with each other	59%	14%	28%
Using condoms together	36%	4%	60%
Preventing pregnancy	36%	3%	61%
What would happen if either of us got an STD or STI	20%	3%	77%
What would happen if we got pregnant	25%	4%	71%
Our sexual or romantic histories	66%	8%	26%
Whether we had STDs or STIs	32%	1%	68%
Other	11%	7%	82%

Table 2.5

Study 2: Associations between adolescents' demographic and personal characteristics and the likelihood of having a DTR talk in the previous relationship.

	<i>N</i>	<i>t(df) /</i> <i>χ²(df)</i>	Group Descriptives	E.S.	<i>p</i>
Age	315	1.523(313)	$M_{DTR} = 16.1; M_{NO} = 16.0$	.17	.129
Gender	317	2.394(2)	Girl: 61%; Boy: 53%; Nonbinary: 52%	.17	.302
Birth sex	317	1.371(1)	Female: 59%; Male: 54%	.13	.504
Sexual orientation	317	0.924(4)	Heterosexual/Straight: 58%; Homosexual/Gay/Lesbian: 59%; Bisexual/Pansexual: 58%; Asexual: 50%; Other: 46%	.11	.920
Sexual activity	317	0.610(1)	Sexually active: 61%; Not sexually active: 56%	.09	.435
Age of sexual debut	227	-0.269(225)	$M_{DTR} = 14.77; M_{NO} = 14.82$	.04	.788
Total sex partners	233	0.691(231)	$M_{DTR} = 2.82; M_{NO} = 2.59$	.09	.490
Total relationships	317	0.771(315)	$M_{DTR} = 3.03; M_{NO} = 2.90$	.08	.441

Note: For continuous variables, M_{DTR} denotes mean scores for those who had a DTR talk, and M_{NO} denotes mean scores for those who did not. For categorical variables, the percentage of participants who had a DTR talk is reported for each category. E.S. = effect size.

Table 2.6

Study 2: Associations between adolescents' previous relationship characteristics and the likelihood of having a DTR talk in the previous relationship.

	<i>N</i>	<i>t(df) / $\chi^2(df)$</i>	Group Descriptives	E.S.	<i>p</i>
Partner age	315	4.055(313)	$M_{DTR} = 15.58; M_{NO} = 14.78$	.46	<.001
Respondent age	315	4.146(257.5)	$M_{DTR} = 14.86; M_{NO} = 14.27$	.49	<.001
Age difference	315	1.383(313)	$M_{DTR} = 0.72; M_{NO} = 0.51$	.16	.168
Partner gender	317	0.642(2)	Girl: 55%; Boy: 58%; Nonbinary: 63%	.10	.726
Gender composition	316	0.358(2)	Same: 55%; Mixed: 57%; Nonbinary: 63%	.06	.836
Relationship length	291	1.667(289)	$M_{DTR} = 8.25; M_{NO} = 6.55$	.20	.097
Anniversary	317	12.856(1)	Yes: 50%; No: 72%	.41	<.001
Seriousness	307	31.042(1)	Serious: 78%; Not: 48%	.68	<.001
Exclusivity	316	7.010(1)	Yes: 60%; No: 41%	.30	.008
Happiness	317	2.574(315)	$M_{DTR} = 3.16; M_{NO} = 2.74$	.29	.011
Sex in relationship	311	3.812(1)	Yes: 63%; No: 51%	.22	.051
Timing of sex	136	1.231(134)	$M_{DTR} = 4.21; M_{NO} = 2.98$	.56	.002
Sexual satisfaction	136	2.450(134)	$M_{DTR} = 3.17; M_{NO} = 2.98$	.45	.016
Condom use	132	2.482(109.7)	$M_{DTR} = 1.92; M_{NO} = 1.16$	.44	.015
Birth control use	130	2.143(116.0)	$M_{DTR} = 1.28; M_{NO} = 0.67$	.37	.034
Protected sex	131	3.060(129)	$M_{DTR} = 2.46; M_{NO} = 1.49$	.55	.003
Orgasm	133	2.333(131)	$M_{DTR} = 2.22; M_{NO} = 1.57$	.42	.021
Partner orgasm	124	0.224(122)	$M_{DTR} = 3.09; M_{NO} = 3.04$	.04	.823
Talking about desires	135	3.080(133)	$M_{DTR} = 2.70; M_{NO} = 2.00$	.54	.003
Cheating	269	6.187(1)	Yes: 66%; No: 50%	.30	.013

Note: For continuous variables, M_{DTR} denotes mean scores for those who had a DTR talk, and M_{NO} denotes mean scores for those who did not. For categorical variables, the percentage of participants who had a DTR talk is reported for each category. E.S. = effect size.

Table 2.7

Study 2: Percentage of responses coded as fitting each theme describing adolescents' motivations for having a DTR talk.

Theme	Percent of Responses
Proactive, planning ahead	33%
Natural, spontaneous	30%
Resolving ambiguity	27%
Commitment	21%
Reactive, in response to event	16%
Feeling strong emotions	16%
Influenced by others outside the relationship	8%
Decisions about sex	8%
Regular, recurring part of the relationship	8%
Experiences in prior relationships	4%
Cannot recall motivation	3%

Table 2.8

Study 2: Percentage of responses coded as fitting each theme describing how adolescents' relationships changed after having a DTR talk.

Theme	Percent of Responses
<i>Positive changes</i>	
Clarity increased	30%
Closeness and intimacy increased	20%
Commitment increased	19%
Increased sense of security in the relationship	12%
Relationship quality improved	12%
Openness, honesty, and trust increased	11%
Led to a healthy breakup	5%
<i>Negative changes</i>	
Dissatisfied with the outcome of the DTR talk	23%
Conflict increased	11%
Commitment decreased	11%
Closeness and intimacy decreased	5%
Jealousy increased	5%
Relationship quality declined	5%
Decreased sense of security on the relationship	4%
<i>Neutral changes</i>	
Established expectations or boundaries	14%
Physical or sexual relationship changed	10%

CHAPTER THREE: PAPER 2, “TIMING OF THE ‘DEFINING THE RELATIONSHIP’
TALK AND SEXUAL BEHAVIOR IN TEENS’ ROMANTIC RELATIONSHIPS”

Abstract

Preventing risky sexual behavior and adverse sexual health outcomes among teens remains a public health priority, thus more research is needed on teens’ sexual decisions and behaviors within romantic relationships. The current study presents results from a preliminary investigation of whether teens ($N = 136$) ages 15 to 17 who had a “defining the relationship” (DTR) conversation in their previous relationships before having sex with those relationship partners reported healthier sexual behaviors in that relationship, compared to teens who had sex but did not have a DTR talk first. Forty-four percent of the sample reported having a DTR talk before sex, and those who did so reported more frequent condom use, longer delay before having sex in the relationship, more frequent sexual communication, and higher sexual satisfaction. No associations were found between having a DTR talk before sex and frequency of birth control use or orgasm. Further, no moderation was found based on participant and/or partner gender or based on the level of commitment in the relationship. These results were consistent with the conceptualization of the DTR talk as a protective relationship strategy for adolescents, although additional research on DTR talks is needed before firm conclusions can be drawn. Clinically, DTR talks may prove to be a helpful component of relationship and sexual education for young people.

Background

Teen sexual health is an important public health concern, as pregnancy and acquisition of sexually-transmitted diseases among teens are prevalent and costly (CDC, 2014a, 2014b; Chesson et al., 2004; Perper et al., 2010; The National Campaign, 2015). Successful efforts to prevent these negative outcomes tend to include comprehensive education about sexual health risk (Chin et al., 2012; Hall, McDermott Sales, Komro, & Santelli, 2016; Kirby, 2008). However, sex education and risk prevention programs are typically not based on science that has examined how teens actually make decisions about having sex; thus, investigation of those processes remains a priority (Stanger-Hall & Hall, 2011). In particular, although much of adolescent sexual behavior occurs within the context of a romantic relationship (Manning, Longmore, & Giordano, 2000; Vasilenko, Kugler, & Lanza, 2016), relatively little research on adolescent sexuality has considered the influence of those relationships and their dynamics on sexual decision-making (Collins et al., 2009).

A rich research literature has demonstrated that romantic relationships are a normative and important part of adolescent development (Carver et al., 2003; Collins et al., 2009). Relationships provide a key context for the development of personal identity as well as skills and expectations for relationships in adulthood (Furman & Shaffer, 2003; Seiffge-Krenke, 2003). Compared to prior generations, modern young adults have higher expectations for the quality, satisfaction, and intimacy of their partnerships and marriages (Finkel, Hui, Carswell, & Larson, 2014; Larson et al., 2002), as well as more visible choices about what relationships can look like (e.g., Baunach, 2012; Hutzler, Giuliano,

Herselman, & Johnson, 2016; Moors, 2017; Twenge, Sherman, & Wells, 2016). These changes mean that it may be increasingly important for adolescents to develop versatile relationship skills and strategies to meet the greater demands of more complex relationship contexts in adulthood (Larson et al., 2002).

At the same time, contemporary adolescent romantic relationships tend to lack clearly defined types or stages and are increasingly characterized by ambiguity (Manning, Giordano, & Longmore, 2006; Rowley & Hertzog, 2016). Ambiguous romantic relationships in which commitment is not clearly defined may be less helpful for adolescent development than more clearly committed relationships (Manning et al., 2006); for example, lower levels of attachment and support in romantic relationships are associated with decreased development of romantic competence (Laursen, Furman, & Mooney, 2006). Further, ambiguity may cause different expectations between partners about relationship commitment and boundaries, which can lead to conflict or even violence when expectations are not met (Draucker et al., 2012).

Ambiguity may also be risky for sexual health: research with young adult populations suggests that discordance between partners in relationship commitment or exclusivity puts individuals at higher risk of adverse sexual health outcomes (Gorbach, Drumright, & Holmes, 2005; Riehman, Wechsberg, Francis, Moore, & Morgan-Lopez, 2006), perhaps because those individuals are making sexual decisions – such as using contraception – based on incomplete or incorrect information about their level of risk. For example, they may not know whether their partner is also having sex with other partners. Some preliminary research suggests similar patterns among adolescents (Towner,

Dolcini, & Harper, 2012; Yamazaki, 2008). Taken together, this evidence suggests that the risk to sexual health is likely highest for adolescents when partners are not clear about the status or commitment of their relationship.

We propose that the “defining the relationship” (DTR) talk – that is, a conversation to establish the status and nature of a relationship (“DTR,” 2018) – is an important and understudied component of young people’s relationship development, and one which may help to reduce ambiguity and promote relationship and sexual health. DTR talks are the source of much popular interest (e.g., Marie, 2016; Stanley, 2014; Yagoda, 2016), yet have been the focus of very little empirical research. For adolescents encountering a culture of increasing relationship ambiguity, DTR talks have the potential to play an important role in establishing relationship expectations, especially those that are relevant for sexual health outcomes such as commitment and exclusivity. A large literature on communication in adults’ romantic relationships highlights the fact that uncertainty about a relationship is associated with less direct communication about the relationship (Knobloch & Theiss, 2011). At the same time, explicitly establishing mutual commitment prior to an important relationship transition can protect against adverse individual and relationship outcomes (Rhoades et al., 2009); for example, research on “friends with benefits” relationships suggests that a lack of communication about expectations for relationship commitment can lead to feeling disappointed and deceived (Bisson & Levine, 2009; Quirk et al., 2014). The DTR talk may serve to help adolescent couples mutually understand their expectations before they make important relationship

decisions, such as having sex. Thus, we conceptualize the DTR talk as a relationship strategy that may facilitate healthy decision-making about sex among adolescents.

It is important to consider that relationship commitment itself shows mixed associations with safer sex behaviors for adolescents. In some ways, serious or committed relationships are associated with greater risk. Adolescents see sexual activity as most acceptable within the context of a serious romantic relationship (Feldman, Turner, & Araujo, 1999), and indeed most adolescents have their first sexual experiences within committed dating relationships (Manning et al., 2000). Condom use also tends to decrease as relationships become more serious (Manlove, Welte, Wildsmith, & Barry, 2014). Conversely, many adolescents do have sex within casual relationship contexts (Manning, Longmore, & Giordano, 2005), and teens often use less effective contraception methods in less committed relationships (A. Z. Johnson, Sieving, Pettingell, & McRee, 2015; Kusunoki & Upchurch, 2011; Upadhyay, Raifman, & Raine-Bennett, 2016). Thus, the association between relationship commitment and sexual health is complex. Importantly, a DTR talk does not necessarily establish a relationship with a high level of commitment; rather, it serves to make both partners aware of what the level of commitment is, whether the relationship is defined to be serious or casual. We expect that DTR talks should be useful in establishing expectations relevant to sexual health regardless of the level of commitment in the relationship.

The majority of the studies reviewed above have defined commitment one-dimensionally: relationships were categorized as either casual or committed at the point of data collection, and researchers tested cross-sectional associations between current

commitment status and current sexual behavior. The timing of sex relative to the establishment of commitment in the relationship may be important to consider, and may help to shed light on the complex pattern of findings regarding adolescent sex and commitment. Relationship development researchers emphasize that the order in which personal commitment to a relationship develops relative to undergoing other relationship transitions is a key predictor of relationship outcomes, including satisfaction, stability, and safety (Rhoades, Stanley, & Markman, 2006; Rhoades et al., 2009; Stanley et al., 2006). Thus, in the current study, we emphasized the timing of the development of a mutual commitment understanding (i.e., the DTR talk) relative to first having sex in adolescents' romantic relationships.

Current Study

The current study aimed to test whether various sexual health behaviors differed for adolescents who had sex with or without first having had a DTR talk in the relationship. We measured safer sex behaviors by assessing the frequency of condom and birth control use during sex, and we measured the length of time in the relationship participants waited before having sex with their partners. We also included measures of sexual satisfaction, orgasm frequency, and how often participants communicated their sexual preferences with their partners.

Hypothesis 1: Adolescents who have a DTR talk before having sex in a romantic relationship will report more physically healthy sexual behaviors, including delaying sex and using condoms and birth control methods.

Hypothesis 2: Adolescents who have a DTR talk before having sex in a romantic relationship will report more psychologically healthy sexual experiences, including greater subjective sexual satisfaction, more frequent orgasm, and more sexual communication.

We also tested potential moderators for the hypotheses above. First, because the majority of the literature on adolescent relationships and sexuality indicates common and widespread gender differences (Collins et al., 2009; Diamond & Savin-Williams, 2009), we tested whether gender of the participant, gender of the partner, and gender composition of the relationship (i.e., same- or different-gender) moderated the link between DTR timing and sexual behaviors. Second, to avoid conflating the establishment of a mutual commitment understanding with the establishment of a committed (versus casual) relationship, we also tested the level of relationship commitment (operationalized as relationship seriousness and exclusivity) as a moderator. Given the lack of existing empirical research about DTR talks, we know of no existing research to guide hypotheses about these moderators; thus, we frame them here as exploratory research questions.

Method

Participants and Procedures

The current study utilized a subset of participants from a larger study exploring teens' use of DTR talks in relationships (Author cite). All procedures in the parent study were approved by a university IRB. Participants were recruited via a Facebook advertisement targeted toward teens ages 15 to 17 in the U.S. Quota sampling based on gender was used to help ensure representativeness of the sample and to ensure that

moderators could be tested. To be eligible for the research study, participants had to report being between the ages of 15 and 17 years old, as well as either a) having been in at least one romantic relationship, or b) having had at least one sexual experience. In addition to these eligibility criteria, participants had to pass a quiz in two tries that confirmed their understanding of the assent form. This resulted in a final sample of 435 teens who were eligible and completed the study survey. Parent permission was not required for teens to participate in this study, and no identifying information was collected from teen participants.

All participants were between 15 and 17 years old ($M = 16.1$, $SD = 0.8$). Five percent of participants reported being in 9th grade, 28% in 10th grade, 38% in 11th grade, and 27% in 12th grade; 1% reported being college freshmen, and 1% were not in school. Sixteen percent of the sample reported a Hispanic or Latino ethnic heritage; among non-Hispanic or Latino participants, 6% reported being African American or Black; 5% American Indian, Native American, or Alaska Native; 10% Asian, Pacific Islander, or Native Hawaiian; 72% Caucasian or White; and 2% reported a different racial identity (e.g., Middle Eastern, North African). Fifty-nine percent of the sample reported their biological sex (i.e., sex assigned at birth) as female and 41% as male; one participant reported an intersex biological sex. Fifty-one percent of the sample identified as heterosexual or straight; 29% as bisexual, pansexual, fluid, or non-monosexual; 12% as homosexual, gay, or lesbian; 4% as asexual; and 4% as another sexual orientation (e.g., hetero/homoflexible, hetero/homoromantic, questioning).

The study survey included a series of questions about participants' personal characteristics, current romantic relationship (if applicable), and most recent past romantic relationship. Romantic relationships were defined for participants as "any romantic, love, dating, or sexual relationship between you and one or more other people." Eighty percent of participants reported a previous relationship and 65% reported a current relationship; 46% reported both a current and a previous relationship. The current study utilizes data describing previous relationships, which had already ended at the time of survey completion and therefore included complete information about the frequency and timing of DTR talks and sexual behavior in the relationship. Participants selected for the current analyses included all those who had sex with the previous relationship partner ($N = 136$); in the study survey, sex was defined as "vaginal intercourse, anal intercourse, oral sex, or genital touching/rubbing" in order to capture all potentially risky sexual behaviors, as well as to be inclusive of sexual behaviors in same-gender relationships.

Measures

DTR timing. In the study survey, DTR talks were defined as "talking to your partner about the status, rules, or future of your relationship." Participants answered the question, "Did you have a DTR talk before you had sex with [your previous partner]?" Responses of No were coded as 0, and responses of Yes were coded as 1. Participants who reported never having a DTR talk in the relationship were also included and coded as 0 (No), because they did not have a DTR talk before having sex with their partner.

Sexual functioning. A series of questions assessed participants' sexual satisfaction and safer sex behaviors. Participants indicated the timing of sex in the

relationship by answering the question, “How long after you started being in a relationship together did you have sex with [your previous partner]?” Participants selected among answer choices phrased with the stem “We had sex _____ [when/after] we started being in a relationship together,” with options including “before,” “right away,” “less than 2 weeks,” “2-4 weeks,” “1-2 months,” “2-6 months,” “6-12 months,” and “over one year.” For analyses, this variable was coded numerically from 1 to 8.

Participants rated the frequency of a number of sexual behaviors, using a scale of 0 (Never) to 4 (Every time) to answer questions following the prompt, “When you had sex with [your previous partner], how often...” Condom use frequency was assessed with the item, “...did the two of you use condoms or dental dams?” Birth control use frequency was assessed with the item, “...did the two of you use birth control (the pill, the patch, the shot, an IUD, etc.)?” Orgasm frequency was assessed for both the participant and the partner with two separate items, “...did [you / your partner] have an orgasm?” Talking about sexual desires was assessed with the item, “...did you talk to each other about what you like or want?” For each of these items, participants could also select a response of “I don’t know,” which was excluded from analyses.

Finally, participants rated their overall sexual satisfaction in response to the item, “How satisfying or enjoyable was sex with [your previous partner]?” from 1 (Very unsatisfying) to 4 (Very satisfying).

Relationship length and commitment. Relationship length, in months, was calculated based on participants’ reports of the month and year their relationship began and ended. Participants rated their relationship seriousness by selecting one of several

options to describe their relationship type. Analyses used a dichotomous variable that classified the seriousness of participants' relationships; the options "Having sex but not in a romantic relationship" (endorsed by 8% of the sample) and "Dating casually" (38%) were coded into a "not serious" category, while "Dating seriously," (26%) "Engaged," (1%) and "Long-term commitment" (<1%) were coded into a "serious" category. Three percent of participants chose to write in a different description; the responses received described ambiguous relationship types such as long-distance, on and off again, or abusive relationships, and were excluded from the coded relationship seriousness variable. Participants also reported whether their relationship was exclusive in response to the question, "In your relationship with [your previous partner], did you expect that both of you should not have any other romantic or sexual partners?" with Yes coded as 1 and No coded as 0.

Gender. Participants identified their own and their partners' gender by selecting one of the following options: "Female/Girl," "Male/Boy," "Trans*, Nonbinary, Genderqueer," or an option to write in a different response. Because only 8% of participants ($n = 11$) and 3% of partners ($n = 5$) did not identify as either a girl or a boy, those participants were excluded from moderator analyses involving gender. Gender composition of the relationship was calculated based on these two variables as either same-gender (coded as 0) or mixed-gender (coded as 1).

Data Analytic Plan

Hypotheses 1 and 2 were tested using multiple linear regression analyses, constructed such that a binary variable of whether or not participants reported having a

DTR talk before having sex predicted each sexual functioning outcome. Separate analyses were used for each sexual functioning outcome. Because longer relationships had more opportunity to include both DTR talks and sexual activity, all analyses also controlled for relationship length.

Research questions addressing moderation were tested using ANCOVA to facilitate modeling the interaction between two categorical variables while still allowing controlling for relationship length. Each moderator was tested in a separate analysis. The DTR timing variable and the moderator variable (relationship seriousness, exclusivity, participant gender, partner gender, or relationship gender composition) were modeled as fixed factors, with both main effects and the interaction predicting each sexual functioning variable.

Results

Table 1 lists means, standard deviations, and correlations for all study variables. Of note, 44% of participants had DTR talks before sex and 56% did not. The majority of relationships (73%) were exclusive, although only 50% of relationships were categorized as serious. There was relatively equal distribution of participant (54% female) and partner (40% female) gender, and the majority of participants (83%) were in mixed-gender relationships.

Table 2 lists results from regression analyses testing associations between sexual functioning variables and whether participants had a DTR talk before they had sex with their partner. Results partially supported Hypothesis 1. Teens who had a DTR talk before having sex did report using condoms more frequently ($\beta = .197, p = .030$); median

condom use frequency was “sometimes” for those who reported having a DTR talk first before having sex, and “never” among those who did not. However, birth control use was not significantly associated with having a DTR talk before having sex ($\beta = .100, p = .274$; median “never”). Teens who reported having a DTR talk before having sex waited significantly longer in the relationship before they had sex ($\beta = .447, p < .001$); for those who had a DTR talk before having sex, the median sexual timing endorsed was 1-2 months after the relationship began, whereas for those who did not have a DTR before having sex, the median response was having sex right away in the relationship.

Hypothesis 2 was also partially supported. Participants who had a DTR talk before having sex reported greater sexual satisfaction ($\beta = .198, p = .027$) and greater frequency of talking about sexual likes and desires ($\beta = .216, p = .016$), though these satisfaction indices did not reflect likelihood of orgasm; no significant associations were found between DTR timing and participant ($\beta = .111, p = .223$) or partner ($\beta = .048, p = .609$) orgasm frequency.

Moderation

No significant moderation by participant gender, partner gender, relationship gender composition, relationship seriousness, or exclusivity was observed for any of the sexual functioning outcomes (all $ps > .11$).

Discussion

In general, having a DTR talk before sex was associated with several indices of safer and healthier sexual behaviors among adolescents, including more frequent condom use, longer delay of sex in the relationship, greater subjective satisfaction, and more

frequent sexual communication. These findings support the proposed conceptualization of the DTR talk as a relationship strategy that may facilitate healthy decision-making about sex for adolescents.

Contrary to our prediction, birth control use was unrelated to the timing of the DTR talk relative to sex, even though condom use was significantly associated. One potential explanation for these findings is that they are consistent with literature suggesting that condom use and other contraception use are often mutually exclusive for adolescents and diverge depending on the level of commitment in the relationship. However, neither index of commitment level (serious/casual or exclusivity) showed significant moderation, suggesting that the association between having a DTR talk before sex and frequency of contraception use was the same regardless of the level of commitment. Still, the small sample size may limit the ability to detect such moderation in the current study. Future research is needed to expand these initial findings and to examine whether it is the process of the DTR talk itself that is linked to later condom and/or birth control use, or whether it is the kind of commitment that is established via the DTR talk that explains the association. Nonetheless, the fact that teens who had DTR talks prior to having sex did report using condoms more frequently seems encouraging, although more research is needed to determine whether DTR talks might have a causal influence on condom use.

Of particular relevance to understanding processes of decision-making about sex in relationships, we found that teens who had a DTR talk before having sex delayed the timing of sex in their relationships. To the extent that teens who delay sex in a

relationship are more likely to be making deliberative rather than impulsive sexual decisions, the DTR talk may serve to facilitate these healthier sexual choices. It may also be the case that waiting until one is able to talk to a partner about a relationship simply sets a higher bar of relationship length, quality, intimacy, or commitment that must be cleared before teens are willing to have sex. All analyses controlled for relationship length and that commitment was tested as a moderator, making the latter explanation less likely. However, even if the function of having a DTR talk before having sex is simply to require teens to wait longer into their relationship development before having sex, we would argue that this still represents a potential protective role for the DTR talk in relationships.

Although these findings demonstrate some encouraging links between having a DTR talk before having sex with a partner and healthier sexual functioning, the current study has several important limitations to consider. First, these data come from a small subsample of a preliminary study about DTR talks; thus, the analyses have low power and should be interpreted with caution. Second, because this study is the first to our knowledge to investigate links between DTR timing and sexual functioning, the measures utilized represent a broad assessment across many domains of functioning, and are therefore rather simplistic operationalizations of complex constructs. Future research should consider more in-depth measures to more deeply explore a particular phenomenon, such as contraception use. Finally, sampling procedures always include trade-offs; although this study avoided some potential limitations by not requiring parent approval and avoiding the restrictions of school-based data collection, it is unclear how

representative of the general population the participants who chose to participate in the current study are.

The biggest limitation to the current study is that the data are cross-sectional, retrospective survey data, which is not ideal for investigating the inherently longitudinal questions related to relationship development over time. Future research should use longitudinal designs to better capture DTR and sexual decision-making processes as they occur. Importantly, this study cannot determine the direction of effects or causality. Our conceptualization of DTR talks predicts that they will cause subsequent changes to sexual health outcomes in the future relationship. However, there are equally plausible explanations of the current findings that suggest DTR talks may be a correlate or a result of pre-existing relationship characteristics or individual differences, such as higher relationship quality or better communication skills. Follow-up studies using experimental or intervention designs could test the impact of having a DTR talk on subsequent relationship quality and sexual behaviors.

Despite these limitations, findings from this initial research on DTR talks in adolescent relationships suggest that they may have important potential clinical implications. Having a DTR talk could be taught as a specific relationship skill as part of healthy relationship and sexual education curricula for adolescents, and results from the current study suggest that doing so may help teens make safer and healthier sexual decisions. Observation of popular culture demonstrates that young people think about having DTR talks (although they may use different terminology) and are eager for effective recommendations about whether and how to do so. If the results from the

current study continue to hold up in future research, interventions can and should capitalize on public interest in DTR talks to promote healthy sexual decision-making in relationships.

Table 3.1

Means, standard deviations, and bivariate correlations for all study variables.

	<i>Range</i>	<i>M</i>	<i>SD</i>	1	2	3	4	5
1. DTR before sex ^a	0 – 1	0.44	0.50					
2. Condom frequency	0 – 4	1.64	1.76	.18*				
3. Birth control frequency	0 – 4	1.05	1.69	.13	.16			
4. Orgasm frequency	0 – 4	1.97	1.59	.13	.23**	.26**		
5. Partner orgasm freq.	0 – 4	3.07	1.22	.06	.05	.02	.29**	
6. Talking about desires	0 – 4	2.44	1.33	.22*	.15	.26**	.45**	.05
7. Timing of sex	1 – 8	3.75	2.27	.49**	.01	.01	.03	.07
8. Sexual satisfaction	1 – 4	3.02	0.94	.17	.10	.20*	.56**	.06
9. Relationship length	0 – 48	9.76	9.88	.15	.06	.09	-.04	-.08
10. Seriousness ^a	0 – 1	0.50	0.50	.32**	.07	.08	.20*	.21*
11. Exclusivity ^a	0 – 1	0.73	0.45	.38**	.14	.06	.22*	.14
12. Participant gender ^a	0 – 1	0.46	0.50	.07	.03	.01	.33**	-.18
13. Partner gender ^a	0 – 1	0.60	0.49	-.08	-.03	-.01	-.17	.25**
14. Gender composition ^a	0 – 1	0.83	0.38	.06	.29**	.29**	-.11	-.12

Table 1, Continued

	6	7	8	9	10	11	12	13
1. DTR before sex ^a								
2. Condom frequency								
3. Birth control freq.								
4. Orgasm frequency								
5. Partner orgasm freq.								
6. Talking about desires								
7. Timing of sex	-.02							
8. Sexual satisfaction	.51**	.06						
9. Relationship length	.07	.34**	-.07					
10. Seriousness ^a	.08	.43**	.14	.30**				
11. Exclusivity ^a	.02	.41**	.19*	.06	.50**			
12. Participant gender ^a	.16	-.00	.32**	-.08	.02	.08		
13. Partner gender ^a	-.17	-.12	-.22	-.10	-.10	-.05	-.69**	
14. Gender composition ^a	-.07	.00	-.09	.06	.07	.09	-.149	.001

Note: ^a Coefficients for correlations involving binary variables represent point-biserial correlations (one binary variable) or phi coefficients (two binary variables).

Table 3.2

Results from multiple regression analyses testing associations between whether participants had a DTR talk before having sex and sexual functioning variables, controlling for relationship length.

	<i>N</i>	<i>b</i>	<i>S.E.</i>	β	<i>p</i>
Frequency of condom use	124	0.689	0.313	.197	.030
Frequency of birth control use	122	0.341	0.311	.100	.274
Frequency of orgasm	125	0.350	0.286	.111	.223
Frequency of partner orgasm	117	0.112	0.220	.048	.609
Frequency of talking about desires	127	0.572	0.233	.216	.016
Timing of sex	128	2.022	0.339	.447	<.001
Sexual satisfaction	128	0.372	0.166	.198	.027

CHAPTER FOUR: PAPER 3, “RECRUITING A DIVERSE NATIONAL SAMPLE OF
TEENS USING FACEBOOK ADVERTISING”

Abstract

The Defining the Relationship Study aimed to gather information from teens aged 15-17 about their use of “defining the relationship” (DTR) conversations in their romantic relationships. Very little information existed about DTR talks prior to this research, so this study used an exploratory approach to gather descriptive data about DTR talks. Therefore, it was important to recruit a sample that appropriately represented diverse teens across the U.S., and I used a variety of strategies to meet that goal. I obtained a waiver of parent permission and used Facebook advertising as an efficient, cost-effective way to reach teens who were interested in participating in this research study; because the vast majority of U.S. teens use Facebook, this method allowed me to recruit a diverse sample of teens from across the U.S. I collected data using an online self-report survey that was accessible on a computer, tablet, or smartphone in order to make the study available to all teens regardless of geographic location or socioeconomic status. To minimize self-selection bias, I used a quota sampling procedure to ensure that we recruited appropriate numbers of participants of relevant demographic identities into the sample. These methods allowed me to obtain a diverse, nationwide sample of 435 teens, and to discover new information about the role that DTR talks play in teens’ lives.

Learning Outcomes. By the end of this case, students should be able to:

1. Understand the connection between sampling method and generalizability of research results;
2. Apply knowledge about different sampling methods to a real-world research case;
3. Analyze issues related to the intersection between research ethics and study recruitment methods;
4. Evaluate the pros and cons of selecting different sampling and recruitment approaches; and
5. Know the motivations and outcomes associated with teens' use of DTR talks in romantic relationships.

Project Overview and Context

This case study details my experiences with recruiting participants and collecting data for my doctoral dissertation study. This study focused on “defining the relationship” (DTR) conversations among teens between 15 and 17 years old who were in romantic relationships. My general research interests center around romantic relationship commitment and the way that individuals make decisions about entering into, maintaining, ending, and in some cases, violating relationship commitments. Making relationship commitments involves many complex considerations about how much we want to be in or stay in a relationship, how strong the barriers are against leaving a relationship, and whether we think we may have other potential options we could pursue outside of our current relationship (Stanley, Rhoades, & Whitton, 2010). One of the

central choices involved in making a commitment is deciding whether to give up some of these other options, such as deciding to not date other people, for the sake of forming a stronger and safer romantic attachment with a current partner (Eastwick & Finkel, 2008).

However, it's not necessarily true that there is only one way to form a relationship commitment. Especially in more recent years, some people are openly choosing to form consensually non-monogamous (CNM) relationships in which one or both partners may still have romantic or sexual relationships with other people (Anderson, 2016), and there is no evidence to suggest that CNM relationships are less committed overall than monogamous relationships (Conley et al., 2013). Therefore, people may currently have more options about what kind of relationship commitments they want to make than was the case when most modern theories of commitment were developed in the 1980s and 1990s (cf. Rusbult, 1980; Stanley & Markman, 1992). These changes to social expectations about commitment may help explain why ambiguity about relationship status and commitment is also increasing, especially in the relationships of young people (Roberson et al., 2016). My dissertation study argues that explicit communication about commitment decisions is likely to be increasingly important as the complexity of such decisions increases. In this study, I focus on DTR talks a primary way that young couples may communicate about commitment decisions.

Given the changing landscape of commitment decision-making, I am also interested in the ways that people learn to have expectations about what relationship commitments should look like. Parts of this learning occur when we see parents' relationships or other examples in our culture as we grow up (e.g., in TV and movies),

but we also learn from our own early experiences. In fact, researchers have argued that many people in Western cultures tend to develop models or views of relationships during our first relationships as teenagers, which continue to inform how we make decisions about relationships throughout adulthood (Furman & Collins, 2007). Examining DTR talks among teens' relationships may therefore be an important way to understand how individuals develop skills and models for making commitment decisions throughout their lives.

My primary research questions for this study were:

- 1) How frequently do teens engage in DTR conversations in their romantic relationships?
- 2) What are the characteristics of DTR conversations in teens' relationships?
- 3) What other relationship characteristics are associated with having DTR conversations?

Research Practicalities

There were a few main considerations that shaped the development of this research study. First, very little existing research had been done on the topic of DTR conversations. Therefore, an exploratory approach to the current study was most appropriate, rather than stricter hypothesis testing or evaluation of specific theories.

Second, the primary aim of this study was to provide descriptive information about the frequency and characteristics of a specific behavior (DTR talks). When making that kind of frequency claim, generalizability and representativeness of the study sample

is of particular importance (Morling, 2015). Therefore, it was important to try to recruit a diverse and representative sample of teens in the U.S. to the extent possible.

Third, research with minors involves many ethical considerations about their competency and rights as research participants. Typically, teens are considered a vulnerable population and are entitled to special protections, such as having their parents provide permission for them to participate in research studies. It was important to balance my research priorities with the limitations necessary to protect potentially vulnerable teen participants.

Finally, funding was limited for this study. I obtained internal university grants for \$3,000 to fund research costs. Therefore, I had to maximize cost-effectiveness of my study recruitment methods while still utilizing an appropriate sampling strategy.

Research Design

Protection of Adolescents

The primary consideration for this research study was how I could collect accurate, representative data from teens about their relationships while still providing appropriate protections for this potentially vulnerable population. Typically, research involving minors must obtain parent permission for teens to participate in a study. In this case, I believed that it was very important for teens to be allowed to consent to participate in this research by themselves, without parent permission. Teens' romantic relationships and sex tend to be sensitive topics for parents, so limiting participation to teens whose parents were willing to provide permission would substantially limit the generalizability of the findings. In addition, I believed that prompting teens to ask their parents for

permission to participate in a study about relationships might put them at risk of being punished or otherwise harmed by parents, which is especially risky for teens with LGBTQ and other vulnerable identities (Bouris et al., 2010). Therefore, I applied for a waiver of parental permission from my university's institutional review board (IRB). In order to make sure that teens were still protected even without their parents' permission, I took several extra precautions in the study design. First, I ensured that the study would be of minimal risk to participants by closely protecting their confidentiality. Second, I provided a list of trustworthy resources for teens about relationships at the conclusion of the study. Third, I included a quiz at the beginning of the study about the informed consent form, and required that all participants passed the quiz within two attempts before they were allowed to participate in the study. This ensured that the teens who participated in the study had a good understanding of what they were agreeing to do and were intellectually capable of providing consent.

Survey Design

In order to collect data from teens across the U.S., I used an online self-report survey. My university provides students and faculty access to a professional subscription to Qualtrics (www.qualtrics.com), which allowed me to build a secure, dynamic survey at no cost. Qualtrics functions well on a variety of computers, tablets, and smart phones, which meant that almost all teens in the U.S. would be able to access the survey regardless of their family's economic status. The online survey format also allowed me to exclude participants who were not eligible to participate based on some of their early responses. Because I would not be providing a large financial incentive to participate in

the study, the survey needed to be brief enough and interesting enough that teens would be willing to complete it. I first compiled every question I would be interested in asking, and then I cut out less essential questions until the survey was a reasonable length (less than 30 minutes) and did not include any questions that were overly burdensome (e.g., very complicated and tedious scales). To further reduce participant burden, I used the survey logic capabilities in Qualtrics to display only questions that were relevant to a specific participant; for example, if participants initially reported that they had not ever had sex, then they did not see any of the later questions that addressed sexual functioning.

Participant Recruitment

To recruit participants, I purchased targeted Facebook advertisements. The very vast majority of teens in the U.S. use social media (Lenhart et al., 2010), and previous research had successfully used Facebook to recruit teen participants for studies on similar topics (Amon et al., 2014). Facebook advertisements were also quite cost-effective; I chose the “pay per click” advertising option, which uses a dynamic pricing model to maximize ad reach while also charging the lowest possible amount for each click. I ended up paying an average of \$0.20 per click, and I was only charged when an interested participant actually clicked on my advertisement. To further maximize the efficiency of my advertisements, I used Facebook’s ad targeting capabilities. I was able to specify that only teens in the U.S. between 15 and 17 years old would see my ad at all, which meant that most of the people who clicked on the ad would be eligible to participate in the study. Finally, I hired a social media consultant for one hour of consultation to help me learn how to design the most effective visual ad. Based on his advice, I obtained several

appealing and colorful stock photos of teenage couples, and used a variety of short phrases to attract attention and interest from potential teen participants (e.g., “Tell us about your relationships,” “Would you like to share your experiences?” “You could win \$25 for participating in our study”). I began a free trial on the Adobe Stock website (<https://stock.adobe.com>), so I was able to obtain the images I needed for free.

Sampling Strategy

Typically, using a random or probability sampling strategy is the best technique when the representativeness of the sample is important (e.g., Groves et al., 2009). However, several challenges in the current research prevented me from utilizing true random sampling. The specific and somewhat controversial nature of the research prevented me from using established methods of probability sampling, such as drawing students from schools (cluster sampling) or pulling data from national data banks. Using Facebook advertisements was a practical solution, but it meant that I did not control or know who was exposed to the advertisements, and that not every member of the target population (U.S. teens) necessarily had an equal chance of seeing the advertisement and joining the study. Based on my study goals, I decided to use a quota sampling procedure. Quota sampling using these recruitment methods is not a random procedure, and therefore places some limits on the generalizability of the research results. At the same time, this procedure offered some benefits for achieving the specific goals of this study. Because of the descriptive nature of the research, it was important to collect a sample that was inclusive of the many diverse identities that may be relevant to teens’ romantic relationships. Gender, racial/ethnic identity, and sexual orientation were particularly

important identities for this research, because of their associations with relationship processes. Facebook advertising allowed me to access teens across the U.S. with diverse identities, and a waiver of parental permission allowed me to eliminate a primary source of selection bias. However, sampling procedures are often subject to *self-selection bias*: that is, the tendency for certain types of people to more readily participate in research studies than others. This bias would lead to some identities being overrepresented in our study, so we countered the expected self-selection bias by employing a quota sampling procedure. First, we identified target numbers of participants in relevant demographic categories, including gender, race/ethnicity, and sexual orientation, based both on the proportion of those identities in the general population and on our desire to oversample certain minority identities in order to obtain sufficient statistical power. As the study continued, we monitored enrollment of participants in each demographic category; when target enrollment for a particular group was reached, we closed the study to any additional participants in that group.

Method in Action

IRB Approval

The first and most challenging part of this research study was to obtain approval from my university's Institutional Review Board (IRB). The IRB is tasked with overseeing all research involving human research participants, and they were appropriately concerned about protecting the welfare of potentially vulnerable adolescent research participants. When preparing my research proposal for the IRB, I consulted with several experts about how to best balance the protection of adolescent participants with

my desire to avoid sampling bias due to requiring parent permission. One of the colleagues with whom I consulted had experience conducting similar research with adolescents, and another colleague had chaired an IRB committee at a different institution and had particular expertise reviewing proposals involving vulnerable populations. Based on their recommendations, I developed a proposal that included many protections for adolescent participants but involved waiving parents' permission, and I included a lengthy section discussing my reasoning.

After submitting my proposal, I was invited to participate in the review meeting of the IRB, during which they would discuss and decide whether to approve my project. Although researchers do not typically attend the IRB meetings at which their projects are discussed, researchers are sometimes invited to make a case to the Board about particularly controversial or complex proposals. During the meeting, I described my reasoning for requesting the waiver of parent permission, and I fielded questions and concerns from Board members about my study procedure. After a lengthy discussion, the Board decided it was ethical to approve my study with the waiver of parent permission.

Recruitment and Data Collection

After building and testing my survey extensively on Qualtrics, I purchased a Facebook ad and began attempting to recruit participants. At first, recruitment was very unsuccessful; I created a study Facebook page and used a boosted post from that page, which resulted in the recruitment of only 12 participants during the first two months. Clearly, I needed to make a change to my recruitment methods. I hired an acquaintance who worked as a professional social media marketing consultant to help me identify ways

I could improve the effectiveness of my recruitment strategy. First, he educated me about the different kinds of advertisements that Facebook offers, and recommended using a different type (pay per click rather than boosted post). Second, he provided feedback about my advertisement, and made recommendations about specific changes I could make to improve their appeal and effectiveness; for example, he suggested using age-appropriate photographs that my participants would connect with. Importantly, I made sure to choose photographs that represented diverse visible identities, including people of color and same-gender couples. I made the recommended changes, obtained approval from my IRB for these new recruitment methods, and began the second phase of my data collection. This time, recruitment happened very quickly; about 10-15 participants completed my study survey per day.

At this point, I began monitoring participant enrollment in order to decide whether I needed to cap enrollment of any particular demographic group. As I expected, participants who identified as female and White had enrolled at a much faster pace than other groups of participants, and I reached my target enrollment of White female participants very quickly. I then created screening logic in the Qualtrics survey that prevented any additional White female participants from participating in the research, in order to leave room for other demographic groups. I also changed my Facebook ad settings to target only boys in order to improve the gender balance of participants.

Data Analysis and Interpretation

I completed data collection in approximately three months after launching my improved Facebook advertisement. Out of the 435 participants in my study, 59% were

female and 41% were male in terms of biological or birth sex; I also assessed gender identity, which showed that 50% of participants identified as girls, 41% as boys, and 9% as a nonbinary identity (e.g., transgender, genderqueer, etc.). Racial and ethnic demographics reflected the U.S. population as a whole according to 2010 Census data. Sexual orientation demographics were more diverse than I had expected, with 51% of participants identifying as heterosexual/straight, 29% as bi/pansexual, 12% as gay/lesbian, 4% as asexual, and 4% as a different sexual orientation (e.g., questioning, flexible, fluid, etc.).

In terms of my primary research questions, I obtained data about DTR talks in current relationships from 214 participants, and data about DTR talks in previous relationships from 181 participants. These sample sizes were sufficient to answer my research questions about describing the characteristics of DTR talks in teens' romantic relationships. I found that 79% of teens reported having had a DTR talk in their current relationships, and that although most participants reported having just one or two DTR talks during their relationship, a significant number (23%) reported having these kinds of talks on a regular basis. I also found that participants tended to have these conversations sooner than 3 months into a relationship, and that most participants had a DTR talk before making a commitment decision like having sex. Over three-quarters of participants reported that their DTR talks occurred face to face, and the majority also said that both partners initiated the DTR talks equally. The most common topics discussed by participants included "Defining us as a couple or being in a relationship together," discussing the future of the relationship, deciding whether dating other people would be

acceptable, sharing relationship histories, and talking about having sex. Fewer participants discussed more unpleasant topics, like what each person considered to be cheating, STDs/STIs, and what would happen if someone got pregnant.

My secondary research questions aimed to test associations between aspects of DTR talks both relationship and sexual health outcomes. I was able to find positive associations between having had a DTR talk and being in a longer-lasting, more committed relationship. Rates of adverse sexual health outcomes (i.e., unwanted pregnancy, STI acquisition) were very low in this sample, so unfortunately I was not able to statistically test these associations; only 3 participants reported having had an STI, and only 6 participants reported pregnancy. These low numbers are likely related to the fact that self-report surveys are not the most reliable way to obtain data about people's medical histories, and because I targeted a general population sample within the study age range. Sampling procedures that were targeted toward individuals with these outcomes (e.g., recruiting participants from a reproductive health clinic) could have led to recruiting more participants who have had these experiences.

Practical Lessons Learned

Be Prepared to Have a Flexible Timeline

It took several months for me to obtain IRB approval for this study, during which I had numerous exchanges with the IRB administrators about study details. Participant recruitment also began quite slowly, and required substantial revision in order to become effective. However, once the “bugs” were worked out, teens began participating in the research at quite a fast pace, and I had to begin closely monitoring enrollment in order to

follow my stratified sampling procedures. Researchers should always give themselves plenty of extra time to address any problems that arise at the different stages of a research study – but they should also be prepared to work quite quickly when the need arises.

Subtle Changes Can Make a Big Difference

Changing from a boosted post to a pay per click Facebook advertisement made an enormous difference in the effectiveness of my recruitment. Researchers should remain dedicated to finding ways to improve their study procedures, and should not become discouraged if things don't work perfectly the first time.

Recognize the Limits of Sampling Procedures

Different sampling procedures have different strengths, and the choice of sampling method should be informed by the goals of the research. I wanted to prioritize the exploratory and descriptive aims of this study, so it was important for me to utilize sampling methods that were as representative as I could feasibly accomplish. However, I was limited by some practicalities of conducting this research project with the resources available to me. Further, the methods I used did not allow me to answer questions that were related to specific risk outcomes; doing so would have required more specifically targeted sampling. Researchers should always consider how to choose the sampling method most suited to their study goals, and they should fully acknowledge the limitations inherent in a particular sampling method.

Conclusions

The methods used in this study were effective for recruiting a diverse, nationwide sample of teens in romantic relationships. Facebook advertising was an efficient, cost-

effective way to directly recruit teen participants, and quota sampling helped to ensure adequate representation of diverse identities. These methods allowed me to answer my primary research questions about the prevalence and characteristics of “defining the relationship” conversations in teens’ romantic relationships. However, these methods were not sufficient for recruiting a sample with a high frequency of adverse sexual health outcomes; research that is primarily interested in “at-risk” samples would need to utilize recruitment methods targeting individuals who are likely to have experienced the adverse outcomes of interest. Findings from this study contribute important new information about how teens make decisions about their commitment in romantic relationships.

Exercises and Discussion Questions

- 1) What are some of the ethical considerations involved in deciding whether to allow adolescents to participate in a research study, either with or without parent permission? Pretend to be a member of an Institutional Review Board; what concerns might you raise?
- 2) What are some of the pros and cons of random versus nonrandom sampling methods? For what kinds of research questions are random sampling methods most useful? For what kinds of research questions are more targeted, potentially biased sampling methods most useful?
- 3) Several times during this case study, I mentioned consulting with others. What are some of the ways in which consulting with others might be helpful during the course of a research study? As a researcher, how would you know when you should seek consultation from colleagues or other experts?

4) Real-world research often involves balancing research goals with practical limitations, whether in funding, time, or other resources, or based on ethical boundaries that must be respected. List some of the main limitations in psychological research today that you think may prevent researchers from drawing firm conclusions. How can researchers either surmount or compensate for these limitations?

CHAPTER FIVE: GENERAL DISCUSSION

These three manuscripts addressed different facets of a research project investigating “defining the relationship” conversations in the romantic relationships of teens and young adults. Collectively, these papers demonstrate that young people do engage in DTR talks in their romantic relationships. In Paper 1, both the adolescent and the young adult sample endorsed engaging in DTR talks in just over half of relationships reported. Further, results from Paper 1 support the conceptualization of a DTR talk as a way for young people to reduce ambiguity about the commitment of their relationships; the status and future of the relationship were the most frequently discussed topics during DTR talks, and qualitative results from the adolescent sample indicated that commitment and clarity were common motivations for and results of DTR talks.

DTR talks were broadly associated with positive relationship qualities and behaviors in these papers. Both qualitative and quantitative data demonstrated that DTR talks tended to occur in more committed and satisfying relationships, and in the adolescent sample, DTR talks were most often described as having caused positive changes in their relationship. A key set of results also linked DTR talks to safer sex behaviors. In Paper 1, adolescents who had DTR talks in their relationships used condoms and birth control more frequently and delayed sex in their relationships for longer compared to those who did not have a DTR talk. Paper 2 further explored these associations with regard to the timing of the DTR talk in the relationship in an adolescent

sample, demonstrating that teens who had a DTR talk before having sex with their partner reported safer sex behaviors than those who had did not have a DTR talk before having sex. At the same time, not all correlates of DTR talks were positive; in both samples in Study 1, DTR talks were associated with higher rates of reported infidelity, and some participants in the adolescent sample reported undesirable outcomes of the DTR talk such as disagreement or dissatisfaction. Further longitudinal and intervention research is needed in order to more fully understand how DTR talks come about during the course of relationship development and how having a DTR talk may impact relationship quality and satisfaction among young people.

This research project has several important limitations. The data are self-reported, collected online, and from only one partner in a relationship; multimethod and multi-informant data are needed in order to reduce the likelihood that response bias and other methodological limitations influence findings about DTR talks. Given the broad and exploratory aims of this project, the measures used in the study surveys may lack depth or detail about any particular construct of interest; my hope is that this study is helpful to direct further research toward more deeply exploring associations between DTR talks and related relationship phenomena, including commitment, fidelity, and sexual decision-making. Finally, the data collected as part of this project are cross-sectional do not support causal inferences about the impacts of DTR talks. Nonetheless, these findings provide a foundation of empirical data suggesting that DTR talks may have positive impacts in the relationships of young people and justifying continued research on the effects of DTR talks. Future longitudinal research will be important to determine whether

DTR talks are a helpful strategy for young relationships, especially because such research has important potential clinical implications for intervening with young people. For example, teaching teens skills and expectations for having DTR talks could supplement existing sex and relationship education curricula, and could provide a concrete strategy to help teens make safer and more thoughtful relationship decisions. Paper 3 demonstrates the feasibility of conducting research on this topic, even with a challenging and potentially vulnerable population.

In conclusion, results from this dissertation project support the argument that the DTR talk is a worthy and feasible topic for psychological research. The manuscripts presented here demonstrate some key features and correlates of DTR talks, providing both a conceptual framework and an empirical foundation for future study. As relationship decisions among young people become both increasingly difficult and increasingly important, research on DTR talks has the potential to promote healthy choices about relationships and sex and to help individuals navigate relationship issues that are relevant to their daily lives.

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