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### Exploring Experiences with Contraceptive Discontinuation

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Running head: CONTRACEPTIVE DISCONTINUATION STUDY

Exploring Experiences with Contraceptive Discontinuation

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Submitted in Partial Completion of the  
Requirements for Departmental Honors in Psychology

Bridgewater State University

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### Abstract

The purpose of this study was to explore women's experiences with contraceptive discontinuation and to analyze the importance of various factors that influenced the decision to switch or discontinue contraceptives. Qualitative interviews asking participants about their experiences with contraceptive discontinuation and decision making were conducted with 15 participants between the ages of 18 and 45 ( $M = 27.6$ ,  $SD = 7.9$ ). Thematic analysis was applied to these interviews, and we identified four themes in the data. The first theme, Early Experiences with Contraceptives, explored the similar perceptions that women had towards the beginning of their contraceptive journeys that led to contraceptive discontinuation. Perceptions of the Risk-Benefit Analysis outlined how each participant weighed the pros and cons of each method, which further influenced the decisions to discontinue contraceptives. Feelings about Contraceptive Information captured the influence of contraceptive information on their decision to discontinue contraceptives. Perceptions of Autonomy examined how the availability of contraceptive information affected participants' perceptions of control and autonomy with their decisions. This study is important because it provides information about the different influential factors in each individual contraceptive experience. What we have learned in this study, may help women make an informed contraceptive decision by giving them a new perspective of the contraceptive paradigm.

**Key Words:** Contraceptive Discontinuation, Birth Control, Healthcare, Oral Contraceptives, Thematic Analysis, Decision-Making.

### **Exploring Experiences with Contraceptive Discontinuation**

Many women use contraceptives for reasons including pregnancy prevention as well as non-contraceptive reasons such as acne prevention and menstrual cycle control (Guttmacher Institute, 2011). According to the Guttmacher Institute (2021a), 28% of contraceptive users aged 15-49 in the United States use permanent contraceptives such as tubal ligation and male vasectomy. Another 21% of women use oral contraceptives as their method of choice, 13% use male condoms, and 13% use intrauterine devices (IUDs). Only about 5% of women in the United States use the short acting hormonal contraceptives including injectables, vaginal rings, and patches. The remaining 20% of women use methods including emergency contraception, withdrawal, or natural family planning methods such as periodic abstinence, cervical mucus tests, or calendar rhythm methods (Guttmacher Institute, 2021a). The purpose of this study was to investigate the different factors that influence a woman's decision to discontinue or go through a period of trial and error with different contraceptive methods.

#### **Motivations for Contraceptive Use**

Women of reproductive age are motivated to begin the use of contraceptives for many of their benefits including preventing pregnancy, regulating menstrual periods, and correcting acne and hirsutism, which is defined as excessive hair growth in unusual parts of the body such as the chest or the face (Geampana, 2019). Convenience is also a major factor influencing contraceptive method decisions; for example, some women feel as though methods such as the vaginal ring or oral contraceptives give them more freedom because they can discontinue anytime they want. Other women are motivated to use long-acting reversible contraceptives (LARCs), such as the IUD, for more freedom to go about their lives without having to think about contraceptives daily or make frequent visits to their healthcare providers (Downey et al.,

2017). Women may also base their decisions on contraceptive failure rates (effectiveness) which describe the risks of becoming pregnant (Guttmacher Institute, 2021b). Some other factors that will be explored in more detail below that have been identified to influence women's decisions to use particular contraceptives are age, relationship status, information from healthcare providers, and the likelihood of experiencing side effects (Geampana, 2019).

### **Age Range**

Research reveals that women in different age groups and cohorts have predictable experiences and attitudes regarding contraceptive use. For example, millennial women may become dissatisfied with oral contraceptives because their lives become busy and stressful. This can have an impact on the daily responsibilities of women like remembering to take a pill, which in turn will affect their experience and may even lead to the discontinuation of oral contraceptives (Caetano et al., 2019). The Guttmacher Institute (2011) found that 54% of oral contraceptive users aged 15-19 who were not engaging in sexual activity reported non-contraceptive motivations for beginning a contraceptive method. Among these adolescents, 54% were using contraceptives to prevent menstrual pain, 33% to regulate periods, and 30% took oral contraceptives to help clear up their acne (Guttmacher Institute, 2011). Adolescents tend to have little experience with contraceptive methods and are more likely to start their contraceptive journey using oral contraceptives for their non-contraceptive benefits, as well as condoms for pregnancy and sexually transmitted infection (STI) prevention, rather than LARCs (Guttmacher Institute, 2011; Millis & Barclay, 2006). Additionally, in the US, patients who are in the younger age ranges are likely to have their contraceptive decisions influenced by their social networks, although these patterns differ between different demographic factors such as social class and race (Levy et.al., 2015). For example, previous research suggests that black and Latina women had many misconceptions about

hormonal contraceptives because they viewed them as being harmful. This was due to the fact that minority women have less knowledge regarding contraceptives than white women and it could be due to the influence of different social networks (Dehelendorf et al, 2011).

As women age, they obtain more experience with contraceptives since the contraceptive decision-making process typically involves a journey of trying multiple methods rather than continuing the use of one method. There is often a lot of trial and error that comes with finding a contraceptive method which may be because women obtain more knowledge and experiences as they age. According to Millis and Barclay (2006), women ages 20-29 discussed having open conversations with their friends and colleagues and they felt as though they did not receive adequate information from their healthcare provider at the start of their contraceptive journey, which in turn affected the way they went about contraceptive decisions. Women in this age group could have more open conversations with their healthcare providers than when they were younger, and they also seemed to be more concerned about the long-term effects of using the pill or any other method. Some examples of these concerns include whether their contraceptive method suits them physically, psychologically, and in terms of their relationships (Millis & Barclay, 2006). Another study reported that women between the ages of 25 and 34 years old were more likely to use oral contraceptives or injectables if they had a long-lasting relationship for pregnancy prevention purposes. In addition to these findings, women between the ages of 35 and 49 were more likely to seek out sterilization due to a decrease in desire for pregnancy, whereas none of the younger age groups considered this as an option (Firman et al., 2017).

### **Knowledge**

Knowledge regarding the different contraceptive options is an important factor when it comes to making a contraceptive decision because the more knowledge women have about

particular contraceptive methods, the more likely they are to choose a method that suits their body as well as their lifestyle. Inadequate knowledge regarding the risks and side effects of each contraceptive method is a contributing factor to contraceptive discontinuation (Pazol et al., 2015). Research shows that different demographic variables such as age, race, and socioeconomic status influence contraceptive knowledge and attitudes. For instance, adolescents who begin the use of contraceptives are less likely to know about LARCs as well as the options other than oral contraceptives available to them. Craig et al. (2014) also found that Hispanic women as well as teenagers and adolescents, are less likely to know that there are different brands of oral contraceptives available to them if they are dissatisfied or experiencing side effects with their current oral contraceptives. This is due to the lack of contraceptive knowledge and educational resources available to them (Craig et al., 2014).

Women are often guided by their healthcare professional when it comes to making a contraceptive choice. While health care providers stress the importance of avoiding unintended pregnancy, women choose to use a particular contraceptive for a number of reasons aside from pregnancy prevention. Women's contraceptive decision making has been shown to be strongly influenced by the suggestions and concerns, especially regarding pregnancy, of their providers (Geampana, 2019). Research discussed by Levy et al. (2015) reported that patients perceive the contraceptive methods suggested to them as being safe because they trust their provider to decide on what is best for them; the providers' recommendations to the patients were rarely challenged. Younger patients, in particular, report trusting the recommendations given to them (Geampana, 2019). Most people obtain their information from their healthcare providers and report trusting them especially if they have a good relationship with the provider. Dehelendorf et al. (2013) found that patients strongly prefer their healthcare providers to contribute to their contraceptive

decision-making process. In addition, most women reported having a strong preference for maintaining a friend-like relationship with their healthcare provider and being able to have this type of relationship was related to increased comfort levels. D'Alessandro (2021) also stressed the importance of being comfortable with one's healthcare provider because having a trusting relationship will lead to better communication and health outcomes.

Alternatively, women often report they do not feel as though they receive adequate information regarding contraceptive options from their healthcare providers (Millis & Barclay, 2006). Topics regarding sexual and reproductive health can be uncomfortable for some patients to discuss, especially when a patient feels as though they cannot trust their provider. A lack of comfort may lead to miscommunication between healthcare providers and patients due to different concerns not being discussed. In turn, some women are turning to other sources like the media or friends to gain more knowledge and talk about what they could not talk discuss with their providers (Yee & Simon, 2010).

Studies have found that contraceptive use in women was strongly influenced by social networking as well as perceptions of their friends' experiences with contraceptive use. For example, one study conducted with adolescents found that there was an increased likelihood of contraceptive use if other classmates were using contraceptives due to the social influence (Ali et al., 2011). It has also been reported that women trust social networks as being reliable sources of information when considering their contraceptive choices. One study even found that women who followed pages on Facebook with contraceptive information had increased knowledge regarding contraceptives when compared to those who did not (Levy et al., 2015). Although most women interviewed for these studies have access to healthcare, many make their



contraceptive decisions based on the opinions and experiences of other women, including friends, family, and even people online.

Women reported their personal research influenced them to utilize or reject specific methods based on experiences and opinions from others. Collecting information from outside sources aside from one's healthcare provider may feel safer for women of all ages, but they may not be informed about all of the potential risks and side effects (Yee & Simon, 2012). For example, another option for obtaining more knowledge regarding contraceptives is contraceptive counseling. Moore et al. (2019) reported that the lack of knowledge regarding LARCs such as IUDs decreased the frequency of use among women in college. Following six months of contraceptive counseling intervention, there was an increase in women who had the intent to use a LARC, emphasizing the importance of having sufficient contraceptive knowledge, as well as the effectiveness and importance of contraceptive counseling intervention (Moore et al., 2019).

### **Side effects, satisfaction, & attitudes**

Many women base their contraceptive decisions on their attitudes, satisfaction, and experience with side effects. In a study conducted amongst 6676 European women via collection of survey data, the participants reported side effects as being the most common reason for discontinuing oral contraceptives, although side effects such as irregular bleeding, are often a result of inconsistent use, emphasizing the importance of knowledge regarding proper contraceptive use (Rosenberg et al., 1995; Westhoff et al., 2007). Common side effects that women experience while using contraceptives include weight gain, mood changes, and nausea, but side effects may vary across the different types of methods (Littlejohn, 2013). Women who experienced side effects were also more likely to be dissatisfied with their contraceptive method (Hirth et al., 2020). Specifically, some women who were using hormonal contraceptives

experienced changes to their mental health; they reported having increased anxiety, irritability, and mood swings which led them to being dissatisfied with that method (Lunden et al., 2017).

In another qualitative research study, interview data regarding contraceptive side effects was obtained from 88 women between the ages of 20 and 29. Thirty six percent of women in this study had concerns regarding weight gain and said that the potential side effects decreased their likelihood of choosing oral contraceptive methods (Littlejohn, 2013). Beliefs and experiences related to side effects resulting from oral contraceptive use can strongly affect their discontinuation as well as initiation (O'Connell et al., 2007). In a randomized trial that assessed the presence of side effects and depression amongst oral contraceptive users, the participants were either given an oral contraceptive or a placebo. The women in both groups reported both depressive symptoms and side effects commonly associated with oral contraceptive use, such as headaches, nausea, acne, weight gain, and irregular bleeding. Interestingly, more participants in the placebo group reported having mood swings, premenstrual syndrome (PMS), abdominal pain, and nausea indicating that beliefs and attitudes about oral contraceptives have a strong effect on the experience of the user (O'Connell et al., 2007).

### **Relationship Status and Commitment**

Research shows that most women consider relationship status and level of commitment as an influential factor when making contraceptive decisions. Some women may be in serious relationships, while others may be having more casual sexual encounters, or in a polyamorous relationship (being involved in multiple sexual relationships), which may in turn affect their choice of contraceptive methods. This is because in a casual or polyamorous relationship, there is more concern for STI prevention. Once women establish a more committed relationship, they may decide to discontinue their previous method of protection such as condoms and seek other

options which may include hormonal contraceptives for pregnancy prevention rather than STI prevention (Brown, 2014; Downey et al., 2017). It is also reported that more women are willing to try LARC methods such as the IUD if they were to get into a long-term relationship (Downey et al., 2017).

Being in a long-term relationship with a committed partner may make women more comfortable with a higher risk of having an unplanned pregnancy; some women stated that they had discussions with their partners about the risks of pregnancy and even discussed options like abortion if this were to happen. Women who are in long term relationships and have this attitude regarding unplanned pregnancy may be less concerned about the consistency and efficacy of their contraceptive method of choice (Geampana, 2019). The seriousness of a relationship may also change with age which may in turn affect feelings and discussions regarding unplanned pregnancy and contraceptive methods (Downey et al., 2017). Once a relationship ends women are more likely to revisit their most recent contraceptive decision. Some women may be influenced by the termination of a relationship and may even decide to discontinue their contraceptive method (Downey et al., 2017).

### **The Present Study**

Based on the research provided so far, there is a significant amount of information on the different factors that play into the contraceptive decision-making journey. Although we are provided with this information, it does not provide us with a framework that investigates women's decisions to discontinue the use of numerous different methods. Women are motivated to use contraceptives for both the contraceptive and non-contraceptive benefits, yet a lot of the time the contraceptive methods provided to these women are not tailored to their individual needs and expectations, which further leads to discontinuation. The purpose of this qualitative

study was to explore women's experiences with contraceptive discontinuation and to analyze the importance of various factors influencing the decision to switch or discontinue contraceptives.

## **Method**

### **Participants**

Women between the ages of 18 and 45 were recruited through personal contacts as well as word of mouth and they were compensated for their participation ( $N=15$ ). We capped the age limit at 45 to confirm that the women recruited were of reproductive age (premenopausal). Participants were aged 20 to 44 ( $M = 27.6$ ,  $SD = 7.9$ ). Twelve participants were white, two were Asian, and one was Cape Verdean. Eight participants were middle class individuals, one was upper class, and six were lower middle class. Fourteen participants identified as female, and one participant identified as non-binary. Nine of the participants identified as straight, four as bisexual, one as pansexual, and one participant chose not to answer. Seven of the participants reported being in a committed relationship, and eight participants reported being single. Ten of the participants were currently using a form of contraceptive, and five were not using contraceptives, though one participant reported ovulation tracking for pregnancy prevention purposes. Of the participants who reported current use of contraceptives, four participants reported using the IUD, three participants were using oral contraceptives, two were using the arm implant, and one was using condoms.

### **Interview and Procedure**

Qualitative interview data was collected by a team of researchers from the Psychology of Women Research Collaborative. Potential participants were sent an initial email asking about their interest in participating in this study. If the individual agreed to participate, we sent a follow up email listing availability to conduct an interview and the consent form. When the time and

date of an interview was agreed upon, we followed up by sending a link to a Zoom meeting. Zoom interviews began with a discussion of the consent form; verbal agreement to participate in the study and to be audio recorded was obtained from each participant. At the beginning of the interview, we started the audio recording and auto transcription provided by the Zoom software. We first asked for demographic information from the participants. We then moved on to contraceptive related questions by asking participants to first list their past and current use of female-based contraceptives.

During the interview we asked questions regarding social factors such as relationship status, sexual orientation, and previous pregnancies in order to investigate the different influences that these factors have on the contraceptive decision-making process. Next, we asked participants if they have experienced any physical or psychological side effects with contraceptives and asked them to go into detail about each one of their experiences. In the final section of the interview, we examined the participants' perceived knowledge regarding their previous contraceptive method(s), further asking who and where they got their information from (e.g., healthcare providers, family, friends, social media, etc.). A full list of questions can be found in the Appendix. These interviews lasted between 20 and 45 minutes. After completing interviews, the interviewers downloaded the audio recordings and transcription provided by Zoom. The auto-generated transcripts were formatted by the interviewers, checked for accuracy, and time stamps were removed to produce a final transcript for coding.

### **Data Analysis**

After finalizing transcripts, we applied reflexive thematic analysis to our data (Braun & Clarke, 2020). This approach uses researchers' subjectivity and interpretations as an analytic resource for analysis in combination with relevant theory regarding contraceptive decision-

making (Braun & Clarke, 2020). The data analysis process we used followed both an inductive and deductive approach. We used a deductive approach to answer our specific research questions regarding motivations that were informed by previous literature for beginning and terminating the use of different contraceptive methods. We used an inductive approach to identify other common themes as they arose that were prevalent among participants regarding contraceptive discontinuation.

Once all transcripts were checked for accuracy, we initially used open coding to identify significant patterns in the ways participants described their contraceptive experiences. The initial list consisted of knowledge, perception, motivations, benefits, disadvantages, side effects and convenience. The team of 12 researchers coded 3 interviews using these initial codes, and then we met to discuss each of the coded transcripts. During this process, we discussed passages that were given the same code and determined more specific codes that were needed to capture the phenomena. Then, informed by this discussion, I individually began more focused coding on the first 3 interviews, as well as the remaining 12 interviews in order to analyze the entire data set. The next step in the process was theme development. Once the 15 interviews were coded, I identified the common themes by examining the codes in each one of the interviews. I identified codes that were similar to one another and grouped them to create overarching themes. For example, the following quote from a participant: “I’m not gonna lie and say it say that I stay on it like completely for myself because, like partially so that a man doesn’t impregnate me but um yeah that I think that is the only like real thing that makes me a little like ‘oh damn I feel kind of stuck.’” was originally coded as Motivation for Pregnancy Prevention. When another participant reflected on a contraceptive method that she previously discontinued, “I felt like it was my decision, but I was heavily influenced by feeling kind of scared into it.”, it was originally coded

as Social Influence on Decision Making. Both participants seemed to have some ambivalence regarding the amount of control and autonomy they had when making a contraceptive decision due to being influenced by other factors. These codes were combined to create the theme Perceptions of Autonomy. The final themes identified by this process were Early Experiences with Contraceptives, Perceptions of the Risk-Benefit analysis, Feelings about Contraceptive Information, and Perceptions of Autonomy. Next, we identified subthemes within these final themes that more specifically captured the phenomena that relate to contraceptive discontinuation. The themes and subthemes will be described in more detail below.

### **Results**

In general, all of our participants reported having some ambivalent perceptions and difficulty during their contraceptive journey with the exception of one who recounted a relatively positive experience and had a practical reason for discontinuation due to changes in availability at her pharmacy. Many women learn about contraceptives through the different experiences they have with multiple methods. The first overarching theme, Early Experiences with Contraceptives captures the subthemes: Oral contraceptives as a gateway and Concerns with psychological effects. This theme explores the similar perceptions that women had towards the beginning of their contraceptive journeys. The second overarching theme, Perceptions of the Risk-Benefit Analysis, outlines how each participant weighed the pros and cons of each method, which further influenced the decisions to discontinue contraceptives. This theme is described by the two subthemes, Trial and error period and Hormonal contraceptives as unnatural. The third overarching theme, Feelings about Contraceptive Information, encompasses the three subthemes: Information gathered from healthcare providers, Information gathered from family and social groups, and Perceptions of contraceptive knowledge in hindsight. Our last theme, Perceptions of

Autonomy, examines all of the factors that influenced contraceptive information and how they affected our participants perceptions of control and autonomy with their decisions. These themes, as well as their respective subthemes, will be described in detail below.

### **Early Experiences with Contraceptives**

**Oral contraceptives as a gateway.** The majority of participants in our study began their contraceptive journey with oral contraceptives between the ages of 15 and 17 and discontinued at least one type of oral contraceptive due to dissatisfaction. Our participants reported beginning their contraceptive experience with oral contraceptives for both contraceptive and non-contraceptive needs, and they also reported having limited knowledge of other contraceptives available to them at the beginning of their journeys. Most of our participants reported being able to actively make their own decision throughout their contraceptive journey although, oral contraceptives seem to be the method suggested to almost everyone at the beginning of their contraceptive experiences, making it seem as though it was a “gateway drug”. For example, participant 5 (age 20), reported starting out her contraceptive journey trying multiple different oral contraceptive brands. She said “So I've taken like a few different brands of the pill to start. I was 16 and I asked my doctor for birth control for both like my sex life and also um just regulation...” Her motivation to start her contraceptive journey was for sexual activity, as well as regulating her menstrual cycle and she consulted her health care provider who suggested oral contraceptives in order to meet her needs. As participants discussed the beginning of each contraceptive journey, we noticed that healthcare providers recommend oral contraceptives as opposed to other methods. This was a common theme with all our participants, and most of them have become dissatisfied with oral contraceptives because they were unhappy with the prevalence of side effects or because oral contraceptives were seen as an inconvenient method.



For example, participant 11 (age 22) said “I started to get a little lax with it and not taking it at the same time every day and I was like uh, I should probably change into something that is easier to manage.” This response indicates discontinuation due to the inconvenience of taking a pill consistently and her desire to seek out a method that was easier to use.

Other participants reported using oral contraceptives at the beginning of their journey because it is the first method suggested to them. When asked about the amount of information received while beginning the contraceptive journey, participant 4 (age 22) says “I didn't really know about other things like an IUD or the arm patch but also, I don't know if that's because I was too young to get it, I don't think a 15-year-old can get [that].” Her response indicates that oral contraceptives were the only method that she felt was available to her because she was not informed about the others. This response also demonstrates that there was a misconception regarding the types of methods that are available to younger women, hence she believed that she was too young to get an IUD. Her belief in age restrictions for the IUD indicates that she was not informed that other forms of contraceptives were available to her at a young age. In fact, we often saw that healthcare providers were perceived to not provide enough information, including age-appropriate use, about all available contraceptives as well as their side effects.

**Concern about psychological effects.** Some of our participants reported psychological changes during their contraceptive journey especially while using oral contraceptives. They reported feelings of change from their baseline psychological state. There were multiple concerns regarding depressive symptoms and anxiety, as well as their relationship to different contraceptive methods. A subset of our participants reported the changes they experienced with their mental health as being a factor leading to discontinuation. For example, when asked about side effects regarding her experience with oral contraceptives participant 3 said,

I think I felt like- like I was on my period, a lot like I was breaking out and just feeling you know when like hormonally kind of crazy with those kinds of symptoms like just.

yeah. I can't remember what else I [felt] like physically, but I just felt mental all the time.

This participant reported concerns that she had with her mental health during the time that she was using oral contraceptives, and these side effects were severe enough to lead to dissatisfaction which further led to discontinuation. While this participant found a direct relationship with changes in her mental health and contraceptive use, other participants responses indicated that there was some uncertainty with whether contraceptives were related to the state of their mental health. These participants had ambivalent perceptions when asked about side effects related to their mental health. Participant 11 said, "I would probably say mood swings are pretty consistent[...] with that. Also [it might] just not be related to the pill, and just related to being a teenager." This indicated the participant's uncertainty about whether contraceptives influenced her experience with mood swings, or if she was going through a natural stage of development. As we found with many of our participants, they were unsure whether the effects were related to their contraceptive method or from what was going on in their life during the time that they were taking contraceptives as they reflected on their experiences in retrospect. When asked to reflect on mental health changes that came up while using a previously discontinued method, participant 12 (age 23) also touched upon her uncertainty about how much of her decline in mental health related to her contraceptive use. This participant struggled with both depression and anxiety before she began the use of contraceptives, and she reported an increase in the number of symptoms she had experienced. She said:

um I think the challenging thing is, I really don't know how much of it is influenced by birth control, so, I really don't know. I think, maybe it is slightly concerning but I don't know how much of that is caused by me or how much is caused by just other factors.

Her response to the question about mental health demonstrated that she was feeling uncertain about whether her method had any effect on her depression and anxiety. However, when reflecting back on her experiences, she associated her anxiety and depression with contraceptives and therefore discontinued. When describing the psychological side effects associated with contraceptives, participant 13 (age 21) said, "I was just a depressed person, so I don't know if, you know, if it was that or just you know, I don't know if it [contraceptives] enhanced it." For this participant in particular, she was also aware that she had an underlying condition, yet she was unsure about how contraceptives contributed to the depressive symptoms that she was experiencing indicating further uncertainty regarding the relationship between mental health and contraceptive use.

### **Perceptions of the Risk-Benefit Analysis**

**Trial and error period.** After using oral contraceptives as a type of "gateway drug" to contraceptive experience, most of our participants had experiences with multiple contraceptive methods and went through a period of trial and error until they reached satisfaction with a particular method, or completely discontinued contraceptives. When reflecting on periods of trial and error, participant 14 (age 32) said,

Yes, so after that I stopped using the pill, because I think the biggest reason is, I just forgot um so, then I tried, the NuvaRing and we... and um anyway, so I was on that for a few years um, and stopped using that I think, mainly because I had like lost it one day and couldn't figure out how long it had been out so that was scary. Um, and then from

there went to the IUD, I only had it in for Um six months, not a good experience took that out, and then the implant.

She gives broad explanations for discontinuation before getting into more detail about some of the side effects that led to discontinuation. Here, she explicitly states that she had experience with discontinuing multiple contraceptive methods indicating that she went through a period of trial and error before using the arm implant which she was satisfied with. This participant also went through a risk-benefit analysis with each one of her previous contraceptive methods. For example, when discussing the NuvaRing, she said,

“I don't remember any sort of big side effects or any big issues or anything like that. The only reason why I stopped using it is because I was using tampons and I must have pulled the ring out with a tampon one day and I didn't notice, so I went to have sex with my boyfriend and when I went to just check after everything- there wasn't one in there and I didn't know how long it had been, it was scary”

Although this method did not cause any direct side effects, her personal experience of misplacing the NuvaRing caused fear and anxiety, which outweighed the benefits of pregnancy prevention further leading to discontinuation. Although this participant did not experience any physical side effects, they played a substantial role in our other participants risk-benefit analysis.

Many of our participants' responses demonstrated the risk-benefit analysis' especially when talking about the side effects from each method. It was typical for our participants to weigh out the multiple factors that influenced their contraceptive decisions; some side effects may be perceived as mild whereas other side effects may be perceived as more severe and lead to discontinuation. For example, participant 5, went through trial and error with the pill and the Depo Provera shot. When deciding whether to discontinue the Depo shot, her healthcare provider

suggested she simply tolerate the negative physical side effects she was experiencing. When asked why she discontinued this particular method she explained that she was experiencing physical side effects and when she spoke to her healthcare provider about it she said,

they suggest you wait, up to a year for like the side effects to go away, but I was like ‘honey I don't have that kind of time’, so, at around like to two months in like a week, maybe two and a half months I call my doctor and she prescribed me [an oral contraceptive pill].

Although the doctors suggested that she wait for the side effects to go away to reach satisfactory results with this method, the risks outweighed the benefits which led to the discontinuation of the Depo Provera shot. She went through a brief trial period with the Depo shot, and she considered the amount of time she had to wait as too much of a risk, which led her to seek out other options.

**Hormonal contraceptives are unnatural.** When asked to reflect on experiences with contraceptives many of our participants reported a desire to return to a natural cycle as part of their risk-benefit analysis. There was a common perception that hormonal contraceptives were “unnatural” and put the participants at risk for experiencing lasting effects when thinking about their future. For example, participant 1 (age 37) said,

That um decision to use herbs instead of pharmaceuticals was like what I was doing at that time, like why I went off the pill, in the first place, and maybe you'll ask me about that, but um the decision to get on the Paragard was like because I really wanted to not use anything unnatural really.

For this participant in particular, her experience in herb school affected her perspective on pharmaceutical use as a whole being an unnatural way to control the body. This perception led her to discontinue the pill and try Paragard, a non-hormonal IUD contraceptive method, that she

perceived to be more natural. Participant 9 (age 24) also mentioned her desire for a natural method, she said, “I don't want to go back on birth control, I want to figure out what's going on with me and then like reconnect with my hormones um and figure out my like my natural cycles...” This participant felt disconnected from her hormones, and her perception of the naturalness of her body was put at risk, therefore she discontinued. She decided to end her phase of trial and error and discontinued contraceptives because she perceived the risks as outweighing the benefits. Participant 7 (age 37) decided to discontinue contraceptives all together because she was concerned that hormonal contraceptives could possibly affect her chances of getting pregnant. She said,

“I definitely wanted to get it out of my system so that I could have, knowing that I'm aging that I could, um, get pregnant, but yes, I would say I'd be more concerned of other factors than the contraceptive, like getting in the way my pregnancy so.”

This demonstrates the risk-benefit analysis as she is saying her reason for discontinuation was due to concerns regarding how contraceptives would affect her fertility in the long run which she perceived to be a greater risk than the current benefit of pregnancy prevention.

### **Feelings about Contraceptive Information**

**Information gained from healthcare providers.** Amongst our participants, the majority of information obtained regarding contraceptives was through conversations with their healthcare providers. Almost all of our participants reported feeling comfortable with discontinuing a previous contraceptive method and collaborating with their healthcare providers. They also reported being able to have an open and honest conversation with their healthcare providers. Although they had positive attitudes towards their healthcare providers, many of our participants still reported a lack of knowledge regarding all the different contraceptive methods

available to them when reflecting on their experiences. One participant described the information given to her by her healthcare provider. When asked whether enough information was received about contraceptive methods, participant 12 said,

I feel like the pill I didn't really get much information about that. The skin patch not as much, the IUD I got pamphlets on so I definitely felt like the IUD was more of an informed decision because I got to choose between which, um- two different IUD's so I did feel more confident in that decision in knowing what I was getting myself into, whereas the first two, or the other ones, I didn't really know all the side effects, so I think that [...] definitely raises some concern.

This response indicates that she feels she did not receive information about the side effects she experienced from her previous contraceptive methods which led to discontinuation. It appears she desired the same amount of information for other methods as she did for the IUD; she was more confident in her decision to use this particular method based off of the information given to her. Although some of our participants seemed to be concerned about the lack of information given to them about other methods, the IUD is a more invasive and long-term contraceptive and may require more information. However, our participants still have the desire to receive the same amount of information about all of the methods available to them. When reflecting on the information received from her healthcare provider, participant 3 described her experience with discontinuing oral contraceptives and learning about different IUD's through a conversation with her healthcare provider. She said,

my doctor said 'okay, well, we can try this kind of pill,' and I was like, 'no, no, no, tell me my other option I don't like this' And then she suggested an IUD and then I actually got to pick which one like read about them all and, like pick which one I wanted to try.

Her response indicates her ability to have an open and honest conversation about discontinuation with her healthcare provider and ask about other options. It also indicates that there was more information provided when given the option to switch to an IUD.

The majority of our participants had the common perception that adequate information about contraceptives were not specified by their healthcare providers. Participant 14 elaborates on her experience with IUD insertion and the dissatisfaction with the information provided to her before this experience which later led to discontinuation. She said,

Yes, so with the IUD I had a problem from the beginning, so it was explained to me that when I went in to have it implanted that it would hurt a little bit, I would probably bleed, she told me like a half hour-hour and then I should have been fine maybe cramping that night. I ended up bleeding heavily for two to three days I had cramps the entire time, so the actual insertion was kind of not the best.

Her response indicates that there was a mismatch with the information provided to her and her subjective experience. She felt as though she did not receive adequate information about the severity of side effects including the heavy bleeding and spotting that she experienced, and these side effects further led to the discontinuation of the IUD.

**Information gained from family and social groups.** The majority of women in our study reported feeling heavily persuaded to discontinue or avoid particular contraceptive methods based on the opinions and information that comes from others. Sometimes participants perceived this as a negative influence on their decision making, while others willingly sought out the information and received it well. Participant 11 said,

I feel like [my healthcare provider] gave me the resources to do that research on my own because they didn't want to sway my opinion but I'd also talked to other friends of mine



who had already started taking contraceptives my cousin had already started with the pill so I felt well informed, but not (yeah) by my doctor specifically.

This response demonstrated that her doctor expected her to do her own research on contraceptives, but she reached out to friends just like our other participants did when considering discontinuation. Participant 6 (age 37) had only had experience with one contraceptive and she discontinued this method because of the information she had received from her mother. She said,

My mom had heard that a young girl died of a blood clot from it- um on the news I believe or something and blood clots run in our family, and she was like you know you need to come off of it immediately and um I guess you know my mom wasn't happy with the doctor because blood clots run in our family but I mean I guess all birth controls are kind of you know prone to or there's a chance that that could happen so supposedly it wasn't any different it was just. (Yeah.) So, then, I stopped taking it and I just never took another birth control again.

Her response indicated that her mother's concerns about her health, led her to discontinuing oral contraceptives and being hesitant to trying contraceptives in the future. This also indicates that her healthcare provider did not tailor her case toward her family's history of blood clots.

Participant 10 (age 31) also reflected on how outside sources affected her choice to discontinue contraceptives. She said,

Um I want to say honestly like after having my son, just realizing like you know how unhealthy - you know, how unhealthy, it can be. Um you know. You hear these stories of people that are on birth control for too long and not being able to have any kids um you know when I was with my son's father, like, I wanted to have more kids and...

Although her response does not indicate exactly who she heard these stories from, it indicates that what she heard about women experiencing infertility after being on contraceptives for too long, influenced her to completely discontinue hormonal contraceptives.

**Perception of contraceptive knowledge in hindsight.** Although there is a lot of ambivalence about the knowledge gained from healthcare providers, when reflecting on contraceptive experiences our participants reported new perspectives and take more accountability for their knowledge regarding contraceptive decisions. For example, when speaking about her experience with the contraceptive patch, participant 6 said,

She was like ‘here, this is the one you want.’ And I was like okay sure.’ From my age and my point of view now like my perspective, I guess, I never would have tried it. Um, I’m always hesitant for like new products, you know that haven’t been on the market for a long time, because I feel like more often than not, you know they’re on the market for a few years or five years and then you hear some horrible side effects stories or I just I like things to have a little bit of a history, before I like something that I’m taking regularly.

Although she had a relatively positive experience with the one contraceptive method that she tried, the patch, she voiced her concerns about the lack of information that was available to her regarding this method. At the time when she decided to use the patch, she trusted her healthcare providers opinion, and she later discontinued this method. When reflecting on the amount of information obtained by her healthcare provider at the beginning of this contraceptive experience with the patch, she reported a desire for a more established product supported by experience or evidence. Similar concerns arose amongst our other participants indicating that there is a common concern regarding the amount of research and information available when making a contraceptive decision, when reflecting on their experiences in retrospect.

### **Perception of Autonomy**

Although most of our participants were heavily influenced by the information that they had received about contraceptive they still felt as though they had autonomy in their contraceptive decision-making journey and still perceived the decision to ultimately be their own. Participant 2 (age 21) began the interview by saying she felt as though she had some autonomy in her decision, but later on in the interview when she was asked if she had received enough information from her healthcare provider she said,

No? So with my primary care, um she just only talked about the pill like I didn't know anything else existed, which I mean at the time I was really young I probably wouldn't have tried anything else anyways, but (right) like I wasn't made aware of it. Um she was kind of just like oh, this is the one that I want you to try like read up on it.

Although she felt control to make the decision to begin contraceptives, she made this decision within the limited parameters of the information that she had, unaware of other choices. This illustrates how participants felt they could make their own decisions but reveals how external factors, rather than simply internal factors, influenced their decisions. For instance, participant 9 had taken oral contraceptives to help with her iron deficiency. When describing the beginning of her contraceptive journey she said,

I was like 16 or 15- or 16, so I think that I had agency, but I didn't really know how to exercise it um I feel like a lot of the times in the medical system, you need to like really advocate for yourself in order to get the treatment that you think is best and if you're not super educated in it, then the doctor just kind of like leads you in one way or another um and I remember going with my mom but she didn't have like any strong opinions either

way, so I think I had choices, but um I don't think I knew exactly what all of my choices were.

This indicates that the decision to begin the use of contraceptives was in her control, yet when she was reflecting on her contraceptive experiences in retrospect, she believed that if she were more educated on the subject of contraceptives, she would have advocated for herself more. Because there was a lack education regarding the contraceptive paradigm it was difficult for her to take control of the beginning of her contraceptive journey.

When examining other influential factors that played into contraceptive discontinuation, we also investigated the different relationship factors that played into the decisions to discontinue contraceptives, giving us further insight into the control that these women had in their decision making. Participant 8 (age 21) said,

My current relationship like I said, like we still use condoms, but he was never like you should stay on the pill he was never you know he never really mentioned anything about it because he's very like it's your decision you do what you want your body type thing and he's very respectful of my choice to stop[...]Yeah, I think if I wasn't in a relationship, I would still be on contraceptives, I would still be on birth control (ok). But, whether I'm single or not I use condoms always.

This response indicates that having a partner played a role in her decision-making process and because she discussed contraceptives with him, she was able to comfortably discontinue the oral contraceptive pill. Her response also indicates that if she were not with her partner, she would have used contraceptives again due to pregnancy concerns and the lack of control she would have if she were to get pregnant with someone who she was not romantically involved with.

## **Discussion**

The purpose of this study was to investigate the different factors that lead to the discontinuation of contraceptives. We identified four major themes in the data through thematic analysis. The first theme, Early Experiences with Contraceptives demonstrated the shared experiences with contraceptives that women have when beginning their contraceptive journey. Many women began the use of hormonal contraceptives at a young age, specifically with oral contraceptives, for both contraceptive and non-contraceptive reasons. They became dissatisfied due to the experience of physical side effects, changes in mental health, or other outside influences which further led to discontinuation. Previous literature mentions the commonality of discontinuation of oral contraceptives (Westhoff et al., 2021) as well as it being the most common method provided to young girls when starting their contraceptive journey (Guttmacher Institute, 2021a), but it has not captured the nuanced reasons for why discontinuation occurred. Notably, when reflecting on their experiences in retrospect many of our participants were not informed about other methods available to them aside from the pill, and they were strongly influenced by their healthcare providers and others to begin the use of contraceptives. As discussed in previous literature people rely on information obtained from their social networks as well as the experiences of other women when making contraceptive decisions (Yee & Simon, 2010). Although there was a small subset of participants who began their contraceptive journey on other methods, there was also a subset of participants who believed that they were too young to be prescribed other methods and had a perception that they were unavailable to them at that time.

Participants also reported changes in their mental health when taking oral contraceptives. Because most of our participants began their contraceptive journey at around 15 or 16 they most likely had other outside factors impacting their mental health which makes it hard to attribute

mental health effects exclusively to contraceptives. Women are likely to undergo many psychological challenges during adolescence which leaves them at risk for anxiety as well as depressive symptoms (Feldman, 2008). This is because adolescence is a time of shifting hormones and moods (Feldman, 2008). It is also important to consider the influence that outside resources have on the experience of side effects. For example, previous research conducted by O'Connell et al. (2007) and Littlejohn et al. (2013) describes how information about side effects can actually cause people to experience them due to their expectations. The experience of changes in mental health might have been influenced by the information these women were exposed to; as hormonal contraceptives have this stigma around them.

The second major theme was Perceptions of the Risk-Benefit analysis. This theme showed us that women ran their own risk benefit analysis before discontinuing a contraceptive method. Previous research discussed by Geampana (2019), emphasized that women generally desire natural medications as opposed to pharmaceuticals, and this is validated in our study regarding the perception of “natural” contraceptive methods. Yet previous research does not elaborate on why women perceive some non-hormonal methods as being more natural. For instance, participants in our sample who used the copper IUD perceived this method as being more natural than other hormonal methods, yet it involves an invasive insertion procedure of a foreign object in the body. The decisions to use a non-hormonal IUD were based on the perception that the presence of hormones in other contraceptives was unnatural for their bodies. Contraceptives are composed of estrogen or progesterone, or often both. These hormones are made naturally in the body, yet the perception of intaking a synthetic version of these hormones with contraceptives seemed artificial and raised some concern amongst the participants. The Guttmacher Institute (2021a) stated that 21% of contraceptive users use other “natural” methods

such as cervical mucous tests, periodic abstinence, or rhythm methods. Yet only one of our participants mentioned these natural family planning methods which may indicate a lack of information provided to them regarding these natural methods for pregnancy prevention.

Our third theme was Perceptions of Contraceptive Information. This theme embodied the information received about contraceptives and how it influenced our participants perspectives on the contraceptive paradigm and further lead to discontinuation. Research conducted by D'Alessandro et al. (2021) emphasizes the importance of being comfortable with one's healthcare provider and its connection to satisfaction with contraceptives, yet it does not capture the concerns that women have regarding the amount of information provided to them for each particular method. However, our participants showed us that even though these women had positive attitudes toward their healthcare providers and were comfortable with them, most of our participants were still dissatisfied with their contraceptive journeys and discontinued a method of contraceptives due to a lack of information provided. Many women in our study mentioned that they received more information about LARCs such as the IUD, and when reflecting on their experiences they wish they could have received the same amount of information about other methods. Our findings were concurrent with the research conducted by Bertotti et al. (2021) which emphasized that the lack of consistency with methods such as oral contraceptives leads women to seek out other options further leading healthcare providers to recommend LARCs such as the IUD or arm implant because the management of these methods are seen as being easier for women and require less responsibility. However, Bertotti et al. (2021) indicated that women are more likely to end up satisfied with their choice of LARCs, yet some of our participants reported the discontinuation of LARCs due to the dissatisfaction with side effects such as spotting or heavy bleeding; those that did not experience this were satisfied with the IUD. The desire to use

IUDs could be due to the availability and marketing of this method as being a long-term, but not permanent, device for pregnancy prevention.

Some of our participants reported being unaware of all of the contraceptive methods available to them at certain periods of their contraceptive journeys. Some women genuinely did not have as many options available to them at the start of their journey whereas other women did, due to the contraceptives that were on the market at that time such as the NuvaRing. Some of our older participants had a hard time recalling previous reasons for discontinuation which could have been due to the generational differences and the resources available to them at that time. Previous research indicates that younger women in the US are more likely to have their contraceptive decisions influenced by their social networks which include friends, family, and internet sources (Levy et al., 2015). Older participants may have not had social media when they started their contraceptive journey and therefore there may have been less of an influence from society. Previous research discussed by Millis (2006) also discusses that older women ages 35 to 49 have different contraceptive needs. For example, women who have no desire for pregnancy are more likely to seek out more permanent options such as tubal ligation, but none of our participants pursued this particular method. Alternatively, younger women are likely to seek out contraceptives for the benefits of them such as menstrual regulation (Firmen et al., 2017). It is also critical to mention that the current needs of our participants may influence how they remember past ones.

Because there was a lack of knowledge about the variety of contraceptive methods, this further reduced the amount of control women felt they had with contraceptive decision making due to the limited parameters of their decision making. This indicates a divergence between the information given to them by their health care providers and patient needs. Previous research



discussed by Moore et al. (2019) demonstrates the importance of contraceptive counseling which further limits dissatisfaction and discontinuation. Contraceptive counseling incorporates multiple educational tools such as, questionnaires, social media, and educational resources that describes all contraceptive methods (Moore et al, 2019). According to the United States Preventative Task Force (USPTF), this intervention can increase knowledge regarding contraceptives which further leads to better health practices and outcomes as well as more satisfaction with decisions (Lee et al., 2011). Moore et al. (2019) implemented contraceptive counseling techniques amongst college students further indicating its effectiveness in regard to satisfaction and continuation. Although this study provided information about all of the contraceptive methods available, it mostly focused on encouraging the use of LARCs which were identified as “first-tier” methods. This particular method is prioritized over other methods due to its effectiveness for preventing pregnancy, hence this may be why the participants from our study reported receiving more information about IUDs as opposed to other methods. Although the results from Moore et al. (2019) focus on user satisfaction with LARCs, some women in our study reported having no interest in trying this method despite the amount of information received about it, further demonstrating a desire for a more individualized approach to contraceptive education. Additionally, most of the women in our study reported having a lack of knowledge regarding contraceptives specifically at a young age, which played a role in their decision to discontinue contraceptives. The results from our study indicate the importance, as well as the collective demand, for a more individualized approach regarding the contraceptive paradigm. The participants also reported the common perception that if they were made more aware of the possible complications that come with contraceptives, they would have diverted from a particular method and pursued a different method.

Our last theme, Perceptions of Autonomy, examined the amount of control that women felt they had when deciding to discontinue contraceptives. Although most of our participants reported having a strong sense of autonomy, it seems as though there was some ambivalence regarding the subject. Previous research discussed by Gomez (2018) states that reproductive freedom and agency is relative to the individual using contraceptives. Feelings of autonomy amongst our participants varied due to their individual experiences and perceptions of what it means to have that control. It is also crucial to mention that women may perceive autonomy differently than the researchers. There are different social factors that influence the amount of control women have when deciding to discontinue contraceptives. But factors such as perception of intimate relationships clearly influence women's contraceptive decisions which may further hinder their control or autonomy since our participants reported being influenced by romantic partners. There is also a societal perception that contraceptives for pregnancy prevention are expected to be the responsibility of women, rather than a choice, as women gain more experience (Fennell, 2011). Additionally, a few of our participants began the use of contraceptives due to health concerns such as iron deficiency, and one of our participants used it to regulate a brain tumor, and therefore the decision to continue with contraceptives was not completely in their control because it was crucial for them to address these health issues.

### **Limitations**

During analysis we experienced some limitations that we were not expecting to encounter. While we were analyzing our data it was difficult to analyze whether all women were provided with the same information due to generational differences. Future research must address the difference in knowledge and experience with contraceptives across all ages and generations. Some of the women we interviewed reported that they were unaware of all of the

options available to them at the beginning of their contraceptive journey, but this could have been due to the difference in age as well as the resources and even the methods that were available in the healthcare industry at that time. There also could have been a lack of resources for them to use; our younger participants had access to resources like Google and social media when beginning their contraceptive journey, whereas our oldest participant did not. The lack of diversity with our participants as well as the limited age range, could have skewed the common themes found while analyzing our results. Only one participant was above the age of 40 (the oldest participant was 44). Most of our participants consisted of heterosexual white women who were recruited from known contacts. This could have also impacted our data because white women received different contraceptive counseling and may have had more knowledge especially if they were middle class and educated (Craig et al., 2014). This could have impacted the amount of information received when making contraceptive decisions. The researchers' interpretations of the data are also limited especially when using a reflexive approach in qualitative research. This may lead to bias due to personal experiences of the researchers which may impact how the data is interpreted.

### **Implications and future directions**

This study provides findings that help us understand the different factors that play into the decisions to discontinue contraceptives. As demonstrated in our research, contraceptive discontinuation is common due to the discrepancies between the expectations what women had with contraceptives and their subjective experiences that led to discontinuation indicating the collective desire for more contraceptive counseling interventions. Furthermore, our research also demonstrated the desire for healthcare providers to provide a more individualized approach when prescribing contraceptive methods. However, women have limited time to communicate with

healthcare providers and this could be resolved by either providing women with more resources to utilize on their own or extending the duration of appointments. Additionally, most women have discontinued at least one form of contraceptives due to the different factors discussed in our results. Future research could use a similar framework and investigate a more diverse sample in order to generalize findings to a larger population in order to better understand the collective dissatisfaction with oral contraceptives. This study is important to the field of psychology because it will provide deeper insight into the factors that have led to the discontinuation of contraceptives in order to prevent this in the future. We hope this research will help to increase knowledge about women's experiences with contraceptives so that they can make more informed choices in the future.

### **Conclusion**

The similarity in the early experiences with the discontinuation of oral contraceptives, demonstrates that this may not be the best option for younger girls due to the inconvenience as well as the possible interference with psychological health. The perceptions of the risk-benefit analysis as well as the perceptions of contraceptive information, demonstrates the demand for a more individualized experience. All of these factors call for women to apply their autonomy when making a contraceptive decision and to take control of their needs. Although it is important to address concerns with healthcare providers as well as having conversations with their partners about contraceptive options, we want to emphasize that it is important for women to obtain contraceptive information, yet they should be aware of the fact that experience with contraceptives varies across each individual. It is also important to recognize how different perceptions can influence experience which can further lead to discontinuation. The results of this study suggest a perception that there must be a reform within the healthcare system in order

to improve the contraceptive experiences of women. The results from this study indicate that women feel as though the prevailing contraceptive education paradigm needs to take a more individualized approach. In order to satisfy the needs of women, we must advocate for interventions such as contraceptive counseling and sex education.

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## Appendix

**Introduction:** Hi thank you so much for being part of this research study. We are really interested in understanding the experiences that women have had with different types of contraceptives, and we appreciate your time.

**Consent:**

Prior to meeting today, you were sent a consent form with information about the study. Before we start, do you have any questions about the study?

*The purpose of this research is to investigate the motivations associated with contraceptive discontinuation. You cannot participate if you are under the age of 18 or above the age of 45. Interviews will be audio-recorded, not video-recorded, and transcribed in order to analyze them; however, no identifying information will be included in the transcripts. Audio files and transcripts will be deleted after the project is completed. You will not be asked to answer any questions that you do not feel comfortable answering, and you will be able to stop the interview at any point in the process should you choose to. If you wish to discontinue participation, the audio file associated with your interview will be deleted immediately.*

Do you consent to participate in this study?

“You will be compensated \$20 for participating in the study today. We can pay using Venmo or personal check. Do you have a preference? “

*Venmo:* “Can I have your Venmo username?”

*Personal Check:* “Can I have your mailing address?”

\*This interview is being audio-recorded. You can choose whether we should have our cameras on or not. Do you want to keep your camera on? Do you care if I keep my camera on? You can also turn the camera on or off throughout the interview if you want.

**\*Demographic Data Collection:** Ask demographic questions

We’re gonna start with demographic questions that I would normally give you a short survey to fill out, but since we’re virtual, I’m going to just ask them verbally

1. **Can you tell me your age (in years):** \_\_\_\_\_
2. **Can you tell me the racial or ethnic identity that you identify with?**
3. **Can you tell me the gender identity that you most closely identify with?** (if they ask: gender identity is defined by your sense of being a man, woman, both, neither, or a combination thereof)
4. **Can you tell me your sexual orientation?** (if they ask: Sexual orientation is defined by the physical, emotional, and or romantic attraction that you feel towards others)
5. **From your best estimate, what’s your socioeconomic status?** (Can probe with: Are you a first generation college student? Were you born or raised in a different country?)

6. **Do you identify with or practice a particular religion?**
7. **What's your current relationship status?**
8. **Do you have any children? If yes, how many?**
9. **Have you ever terminated a pregnancy?**

### **Begin Interview Questions**

-Those are all of the demographics that I have for you. Now we're going to begin the interview focused on contraceptive questions....

- Can you list the contraceptives that you have used in your past, starting with the first one that you used up until now?
- Regarding the first (go through each contraceptive mentioned) contraceptive method you tried:
  - Can you tell me some reasons why you decided to try to this method?
    - Did anyone or anything influence you when you were making the decision to try this method? (like parents, friends, health care providers, or online research)
  - Can you talk a little bit about how much control or autonomy you felt you had in making contraceptives decision?
  - Can you tell me a little more about why you stopped using this contraceptive method?
  - How old were you when you stopped using your previous contraceptive?
  - You've touched on some of this already, but can you tell me about some of the pros and cons that led you to switching/ discontinuing your previous method?
- Okay we're gonna talk a little bit more about how some social factors play into your contraceptive decision making. So, to start, can you tell me about your sexual orientation?
- Can you tell me about your previous or current romantic relationships?
- Do you have any children?
- Can you talk a little about how some of those factors might play into your contraceptive decision-making?

### ***If probe is needed:***

- *For example, did being in a relationship or being single affect your contraceptive decision making?*

- *Did your partner affect your contraceptive-decision making process?*
- *Did you have a conversation with your partner about your contraceptive choice?*
- *Do you think your age played a factor in your contraceptive decision-making?*
  - *Can you tell me a little bit about how?*
- Now we're gonna talk about some of the potential side effects of contraceptives more specifically. Can you tell me if you experienced any changes in your physical or mental health while using contraceptives?
  - ***If needed:*** remind them to talk about PHYSICAL or MENTAL effects
- In your opinion, do you think any of these side effects were unusual or particularly concerning to you?
- Did you have any concerns about preventing pregnancy with your contraceptive methods? Were you concerned about its effectiveness? Can you tell me some reasons why?
  - ***If needed or applicable:*** Have you ever had an accidental or unplanned pregnancy from contraceptive failure? Can you talk a little about that and how it might affect your decision-making?
- Did you have any concerns about the convenience or cost of your contraceptive methods? What about the accessibility about different contraceptive methods?

### Knowledge

- Who did you obtain your first contraceptive method from?  
Do you feel as though you received enough information about the different contraceptive options available to you before selecting one?
  - Where did you receive information from about different contraceptive methods? (***for example:*** *health care providers, friends, family, social media*)
  - Which one of these sources of information influenced your decision the most?
- Do you feel as though you were provided with enough information about the pros and cons of all of the contraceptive methods available to you?
- Do you feel as though you can have an open and honest conversation with your healthcare provider about contraceptive options and use?
  - Can you tell me about a conversation you had with your health care provider when discussing contraceptive options?

- Did your healthcare provider suggest a Long Acting Reversible Contraceptive (you may have heard of this as a LARC) to you? (A long-acting reversible contraceptive refers to the intrauterine device that is inserted into the uterus or the implants inserted into your arm.)
- Does the current political climate regarding access to abortion make you think any differently about contraceptives?
  - What about the current political climate more broadly?

**Okay, now to wrap up:**

- Can you tell me about where you are now with your contraceptive method journey?
  - Are you satisfied with your current contraceptive method and can you explain why you are satisfied or not?
  - Is your method of contraceptives easy to access and use and can you explain?
    - *If needed:* For example, can you afford it? Do you have health insurance that covers some or all of the cost? Is it easy to physically obtain – from a pharmacy or doctor?
- Overall, have you been content or satisfied with your experience using contraceptives?
  - If you haven't been, what is missing or what else would you like from it?
- Are there any other factors that played into your contraceptive decision-making journey that we have not discussed yet?

**Conclusion:**

Before we end, we have just a couple last questions...

- Is there anything that I didn't ask you about your contraceptive use that you'd like to share?
- Do you have any questions for me?
- Thank you for your time and contribution towards our study! We wanted to remind you that you can expect payment within 48 hours.