

PREGNANCY DECISION MAKING

Predictors of Early Stress and Adjustment

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Pregnancy decision making was examined among pregnant and non-pregnant women seeking pregnancy testing. The majority of women had decided upon and were certain of a decision to either abort or carry a possible pregnancy before learning the pregnancy-test results. Adjustment to pregnancy decision making was examined longitudinally among the women who tested positive for pregnancy. Pregnant participants were interviewed about their decisions to carry or abort their pregnancies at three times—immediately prior to pregnancy testing, a day after receiving positive test results, and 4 weeks later. Nearly all maintained their original decision over the course of the study. Adjustment was related primarily to which outcome was chosen and, to a lesser degree, to whether a woman was initially decided or not upon the outcome. The time surrounding pregnancy testing was stressful for women who decided to abort their pregnancies. However, negative feelings at the time of pregnancy testing among those who later aborted their pregnancies subsided by the end of the study and did not differ from those who carried their pregnancies.

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During their lifetime, many women will experience an unplanned pregnancy and make a decision to carry or terminate the pregnancy. Nearly half of all pregnancies are unintended, resulting from the nonuse of or failed contraception (Jones, Forrest, Henshaw, Silverman, & Torres, 1988). About half of those pregnancies are aborted (Forrest, 1987; Westoff, 1988), for an annual total of approximately 1.5 million abortions in the United States (Henshaw, Koonin, & Smith, 1991). Therefore, over the life span, about one out of five women will have an abortion (Forrest, 1987). A woman's decision to continue or terminate an unintended pregnancy involves considerations such as one's age, pregnancy history, educational and occupational goals, financial resources, marital status, religious beliefs, and health problems (Torres & Forrest, 1988). Although pregnancy decision making occurs frequently, little research has focused on this process. Pregnancy decision making refers here to the decision to either abort or carry a normal pregnancy.

The focus of much research on abortion has been on women's emotional adjustment after carrying out a decision to carry or terminate a pregnancy (e.g., Adler, 1975; Osofsky & Osofsky, 1972) rather than the decision-making process per se. In contrast, Bracken, Klerman, and Bracken (1978) specifically examined the pregnancy decision-making process and reactions to it. They conducted a study of pregnancy decision making of primarily lower-income Black women who either decided to carry or to abort their pregnancies. Women were matched on race, welfare status, age, and parity. Information was gathered once via interview and questionnaire on either their first visit for prenatal care if they were going to carry the pregnancy or just before or within several days of an abortion. They asked women to make retrospective judgments about the pregnancy decision-making process. Over half of those who carried their pregnancies and a quarter of those who aborted made their decisions prior to any suspicion of pregnancy. Over three quarters of both the delivery and abortion groups made their decisions after 1-4 weeks of suspecting a pregnancy. The rest decided to abort or to carry their pregnancies after 4 weeks of suspecting a pregnancy. The abortion and delivery groups did not differ in their decisiveness. Sixty percent of both groups reported never changing their minds about the decision. Further, members of the abortion group reported greater difficulty making their decision and were less satisfied with their decision than were members of the delivery group. This research is useful in understanding pregnancy decision making; however, it is limited. Women were assessed only once and were asked retrospectively about their decisions, and the sample was not representative in terms of ethnicity of all women seeking abortions.

Pregnancy decision making may involve seeking out advice and emotional support from others. Possible sources of social support for pregnancy decisions include friends, partners, parents, and professionals (Lewis, 1980). Faria, Barrett, and Goodman (1985) reported that 72% of their

sample of women seeking abortions sought help for deciding the outcome of their pregnancies. Further, Bracken et al. (1978) reported that although a large majority of women who either aborted or who carried a pregnancy discussed their pregnancies with at least one other person; those who carried were more likely to discuss the pregnancy with others.

There is accumulating evidence indicating that once the decision to abort a pregnancy is made, abortion is a relatively short-term stressor from which women recover quickly after the decision is carried out. Two recent reviews of the research examining women's adjustment to abortion (Adler et al., 1990; Dagg, 1991) cite consistent evidence that women may experience feelings of regret, sadness, or guilt prior to an abortion but that those feelings turn into feelings of happiness and relief after an abortion. Severe negative reactions after an abortion are relatively infrequent and tend to be related to preexisting emotional problems and not to the abortion itself (Adler et al., 1990; Dagg, 1991). However, some of the women who abort a pregnancy and who experience greater difficulty in making an abortion decision may experience negative reactions, such as regret, anxiety, depression, and anger, 2–3 months after the abortion (Adler, 1975). According to Adler et al. (1990), limitations in much abortion research include a lack of preabortion data, a very short follow-up period of often a few hours or days after an abortion, reliance on volunteer samples that may underrepresent the stress involved with abortion, and a lack of an appropriate comparison group of women matched on "wantedness" of the pregnancy.

Much abortion research has focused on adjustment as a function of how women resolve pregnancy decision making, that is, whether they abort or carry a pregnancy. Little attention has been paid to how other aspects of pregnancy decision making, such as whether a woman is initially decided on an outcome at the time of pregnancy testing, might also contribute to adjustment after the decision is carried out. Pregnancy is a life event that can be anticipated, and discrete ways of dealing with it can be contemplated. Prior to pregnancy, women can weigh the pros and cons of a particular decision. Deciding either to abort or to carry a pregnancy prior to its occurrence may be a form of anticipatory coping for when an actual pregnancy occurs. Anticipatory coping is defined as the stage in the coping process prior to the actual occurrence of a stressor when an individual prepares for this stressor under conditions of uncertainty (Folkman & Lazarus, 1985). During that time, an individual may anticipate problem-solving strategies, use cognitive coping strategies such as denial, worrying, or rationalization, and/or mentally rehearse behavioral responses to the stressful situation (Rosenstiel & Roth, 1981).

Resolving how to deal with a pregnancy before confirming that one has occurred may help adjustment during and after pregnancy decision making, especially when abortion is chosen. Those who are undecided about the outcome of a pregnancy prior to its occurrence must cope with

both making and carrying out a decision to act, whereas women who are decided must primarily cope with carrying out their decision. Deciding upon a course of action before a pregnancy occurs may facilitate adjustment because coping efforts may be initiated upon learning of the pregnancy rather than after a decisional period. In general, those who anticipate coping with a stressor may have a heightened sense of control, as compared with those who have not mentally worked through a coping strategy, that may also aid adjustment (S. Thompson, 1981). The anticipation of coping with aversive events has been related to lower arousal in laboratory subjects exposed to loud noises (P. Thompson, Dengerink, & George, 1987) and to better adjustment among spinal-cord injury patients returning home from the hospital (Rosenstiel & Roth, 1981). Having a prior mental plan may also reduce the need for social support when a stressor does occur.

The purpose of the present research was to broaden our understanding of adjustment to abortion by examining it in the context of an earlier period of pregnancy decision making and a later period of adjustment than those incorporated in past studies. The earlier period was the time immediately before pregnancy testing, and the later period was 1 month after pregnancy testing. The first goal was to describe pregnancy decision making among women based on responses gathered at the time of pregnancy testing and prior to carrying out any decision. We attempted to minimize reliance on retrospective judgments of pregnancy decision making by first interviewing women prior to the confirmation of a pregnancy. The second goal was to examine reactions to being pregnant and emotional adjustment up to 1 month after decision making as a function of two aspects of pregnancy decision making. Adjustment was examined both as a function of whether a woman was decided or undecided about her pregnancy decision prior to pregnancy testing and as a function of the actual decision that was carried out. Adjustment was defined as stress surrounding pregnancy decision making, global emotional adjustment, and satisfaction with the decision.

We used a longitudinal design to investigate pregnancy decision making and adjustment to the decision to abort or to carry a pregnancy. This design was used to address some of the concerns of Adler et al. (1990) about abortion research. Women who were sampled in a community-based health clinic were interviewed up to three times about pregnancy decision making. The first interview occurred immediately prior to a pregnancy test. Those who were pregnant were also interviewed a second time within 24 hours after receiving a positive test result and a third time approximately 1 month following the test result.

Based on past research, we hypothesized that women who aborted their pregnancies would initially be more distressed at the time of pregnancy testing than those who eventually carried their pregnancies. We also ex-

pected that those who were undecided prior to pregnancy testing would be more distressed initially than those who were decided. Outcome measures were compared for three groups of women: (a) those who were initially undecided upon an outcome and who later aborted a pregnancy (undecided aborters), (b) those who were initially decided upon abortion and who later aborted (decided aborters), and (c) those who were initially decided upon carrying a pregnancy and who did so (decided carriers). Insufficient cell sizes precluded examining other possible groups.

We predicted that the women in the undecided-abortion group would experience greater distress prior to carrying out their decision than would those in the decided-abortion group, who would in turn experience more distress than the decided-carry group. All women who aborted their pregnancies were also expected to experience a decrease in negative feelings and an increase in positive feelings over time after an abortion, resulting in levels similar to those of women who carried their pregnancies. Further, women who carried their pregnancies were expected to seek out social support more frequently during the decision-making process than those who aborted or who were decided. Those seeking abortion may seek less social support because they perceive their social networks to be less supportive of that decision than the decision to carry a pregnancy (Bracken et al., 1978).

METHOD

Participants

Women were sampled for the study when they sought a pregnancy test at a private women's health clinic in southern California that specialized in low-cost gynecologic and prenatal care. The requirements for participation were that the women be at least 18 years old and speak English fluently.

A total of 121 women seeking pregnancy testing were approached to participate in the study, and 98 agreed to do so (acceptance rate = 81%). Reasons for not participating included too little time ($n = 14$), family members were waiting ($n = 4$), did not want to discuss a possible pregnancy ($n = 4$), and concern about confidentiality ($n = 1$).

Of the 98 women who agreed to participate, 44 were pregnant and 54 were not pregnant. Of the 44 women who were pregnant, 11 were dropped from the analyses. Two participants had a miscarriage during the course of the study, one woman was still undecided about the outcome of her pregnancy at the final assessment, and eight were lost to follow-up because they voluntarily withdrew or could not be reached by telephone after Time 1 (attrition rate = 18%). Therefore, the 87 women considered for the present study were the 54 who were not pregnant and completed

the first interview and the 33 who were pregnant and completed all three interviews.

The 33 pregnant women who completed all times of measurement were compared with the 8 pregnant women who were lost to follow-up using *t* tests on Time 1 measures of negative mood ($M = 2.43, SD = 0.89$ vs. $M = 2.23, SD = 0.84$), positive mood ($M = 2.01, SD = 1.19$ vs. $M = 2.09, SD = 1.21$), a composite measure of stress over the possibility of being pregnant ($M = 3.20, SD = 1.41$ vs. $M = 2.50, SD = 0.91$), years of education ($M = 13.64, SD = 2.28$ vs. $M = 13.25, SD = 2.77$), age ($M = 25.73, SD = 6.79$ vs. $M = 22.75, SD = 5.50$), and intendedness of the pregnancy ($M = 1.42, SD = 1.06$ vs. $M = 1.38, SD = 0.52$). None of the *t* values were significant, thereby supporting the notion that attrition was not disproportionately related to any particular characteristics of those who withdrew.

The mean age of the women for this study was 26.7 years (range = 18–51 years, $SD = 7.6$ years), and they had an average of 14 years of education ($SD = 2.3$ years). The sample was comprised of a slight majority of White women (63.2%, $n = 55$). The rest of the sample was Latino (21.8%, $n = 19$), African American (5.7%, $n = 5$), and Asian (9.2%, $n = 8$). Most of these women were single and never married (66.7%); the rest were married (19.5%), divorced (9.2%), separated (2.3%), or widowed (2.3%). Seventy-seven percent of the sample women had no children. Among those with children, the mode was one child (range = 1–5 children). Nearly two thirds of the women in the study worked full or part time (62.1%). The other participants were unemployed (17.2%) or students (16.1%) or cared for children at home (4.6%). Pregnant and nonpregnant women were compared on these variables using *t* tests and chi-square tests. There were no differences between any of the groups.

Our sample of pregnant women is comparable to a national sample of 1.5 million U.S. women having abortions in a single year in terms of the proportion of White versus minority women, the distribution of women between the ages of 18 and 40, and the proportion of married versus unmarried women. However, a greater proportion of our participants had never given birth before and had had no prior abortions (Henshaw et al., 1991).

Procedure

Women were recruited for the study when they approached a women's health clinic for pregnancy testing on a walk-in basis. Participation in the study was unrelated to the receipt of medical services. After agreeing to participate, each woman was fully informed of the nature of the study and was asked to sign a consent to participate. The first interview (Time

1) took place at this point, prior to a pregnancy test. Those who agreed to participate completed an affect questionnaire and were interviewed using closed-ended questions for approximately 20–30 minutes about their thoughts, feelings, and behaviors regarding the possibility of being pregnant. Next, the women's urine samples were tested for pregnancy. Women were given the results either immediately in person or within a few hours by telephone. Those whose pregnancy tests were positive were interviewed two more times. The second interview (Time 2) took place approximately 24 hours after receiving their test results. This interview was conducted over the telephone and took approximately 20 minutes. The third interview (Time 3) took place approximately 4 weeks after the second interview. This interview was also conducted over the telephone and lasted about 20 minutes. Those who were not pregnant did not receive any follow-up interviews after the first one. Interviews were conducted by doctoral students in psychology and medical anthropology trained in interview techniques.

Measures

Characteristics of pregnancy decision making. At Time 1, women were asked questions about their decisions to abort or carry their pregnancies. No one in our sample indicated that she was going to deliver the baby and then give it up for adoption. Thus, reference to the pregnant participants who carried their pregnancies indicates women who decided to keep their babies.

Women were asked four single-item questions about pregnancy decision making. Prior to learning the results of their pregnancy test (Time 1), women were asked two questions about the extent to which they intended their pregnancies and the extent to which they felt a choice about the outcome of the pregnancy was important, both rated on a 5-point scale from *not at all* (1) to *completely* (5). They were also asked whether they had already decided to carry or abort the pregnancy or if they were undecided about the outcome. If decided about the outcome, they were asked to rate how certain they were of the decision from *not at all* (1) to *completely* (5).

Adjustment to pregnancy and pregnancy decision making. Among the pregnant women, adjustment to both pregnancy and making a decision about the outcome of a pregnancy was examined in four ways. These women were asked about the stress of making a decision about the outcome of their pregnancy, positive and negative affect, and satisfaction with their decisions.

For all pregnant women, a stress of pregnancy decision making index was computed by averaging the responses to two questions asked at Times 2 and 3 about the extent to which the pregnancy decision was conflictual

and difficult; both questions were answered on a 5-point scale from *not at all* (1) to *extremely* (5) ($r = .79$).

To measure positive and negative affect, a shortened version of the Affects Balance Scale (Derogatis, 1975) was used. Participants were asked to rate each of a list of adjectives on a scale from *not at all* (1) to *extremely* (5) at Times 1, 2, and 3. Negative affect was measured with 12 items tapping feelings of depression, anger, guilt, and hostility ($\alpha = .89$). Positive affect was measured with four items tapping feelings of contentment and joy ($\alpha = .94$). Correlations between positive and negative affect at Times 1, 2, and 3 were $-.42$, $-.50$, $-.57$, respectively.

At Time 3, women were asked to what extent they were satisfied with their decision; answers were on a 5-point scale from *not at all* (1) to *extremely* (5).

Social support. Women were asked at Time 2 the extent to which they sought social support during the past week, including the six days prior to the pregnancy test and the one day following news of a positive pregnancy test, in regard to being pregnant. A measure of seeking social support was comprised of questions on the amount of informational support (three items) and emotional support that was sought (two items) ($\alpha = .79$). Examples included, "I asked women who have had similar experiences what they did" and "I talked to someone about how I felt." The items were borrowed from the COPE, a multidimensional coping inventory (Carver, Scheier, & Weintraub, 1989). Participants responded on a 4-point scale from *not at all* (0) to *a great deal* (3).

RESULTS

Descriptive Characteristics

Prior to pregnancy testing, the majority of women (81%, $n = 70$) indicated that their pregnancies were unintended. The majority of women (78%, $n = 68$) also reported that they had already decided about the outcome of their pregnancy at Time 1. At Time 1, 34.5% ($n = 30$) of the women said they would carry the pregnancy, 43.7% ($n = 38$) said they would abort the pregnancy, and 21.8% ($n = 19$) were undecided.

Those who indicated at Time 1 (prior to pregnancy testing) that they were already decided about the outcome of the pregnancy were asked how certain they were of their decision. Eighty-eight percent indicated that they were highly certain of their decision (4 or 5 on a 5-point scale), 10% were moderately certain (2 or 3 on a 5-point scale), and only 2% were not at all certain (1 on a 5-point scale). Virtually all of the women (95%) felt that it was very important to have a choice about deciding the outcome of their pregnancies.

Table 1
Initial and final pregnancy decisions among pregnant participants

<i>Decision Status at Time 1</i>	<i>Pregnancy Decision at Time 3</i>		<i>Total</i>
	<i>Abort</i>	<i>Carry</i>	
Undecided	6	1	7
Decided – Abort	15	1	16
Decided – Carry	0	10	10
Total	21	12	33

Adjustment to Being Pregnant and Pregnancy Decision Making

The remaining analyses were based on the responses across all three times of measurement of women who were pregnant. Table 1 lists the pregnant participants' anticipated pregnancy decisions at Time 1 and the actual outcomes of the pregnancies at Time 3. At Time 1, 10 women said they would carry the pregnancy, 16 said they would abort the pregnancy, and 7 were undecided. All of the women who responded that they were undecided about the outcome of the pregnancy at Time 1 were also still undecided at Time 2 (24 hours later). At Time 3, 1 month after pregnancy testing, all 10 women who initially said they would carry the pregnancy were still planning on doing so. Of the 16 who originally decided to terminate the pregnancy, 15 had done so. One woman who initially said at Time 1 that she would terminate the pregnancy decided to carry the pregnancy by Time 3. Of the seven women who were undecided about the outcome of their pregnancy at the outset, six decided to terminate the pregnancy and one decided to carry. All abortions were also completed by Time 3. In sum, the majority of women maintained their original decisions to either carry or abort the pregnancies. The majority of women who were initially undecided about the pregnancy outcome decided to abort the pregnancy, and only one woman changed her mind about the outcome of her pregnancy.

To examine the impact of being initially decided or not on an outcome and the actual outcome of the pregnancy, the following analyses were based on three groups of women among those who were pregnant.¹ The three groups involved women who were initially undecided about the pregnancy decision and who later aborted their pregnancies (undecided aborters, $n = 6$), women who initially decided upon abortion and who later aborted their pregnancies (decided aborters, $n = 15$), and women who initially decided upon carrying the pregnancy and who also followed through on their initial choice (decided carriers, $n = 10$). Two pregnant participants did not fit into these three categories. Therefore, the woman who was initially undecided and who later carried her pregnancy and the

Table 2

Decision-making stress as a function of group status and time of measurement

Group Status	Time of Measurement			
	Time 2		Time 3	
	M	SD	M	SD
Undecided aborter	4.08	1.11	3.50	1.41
Decided aborter	2.61	1.52	2.12	1.24
Decided carrier	1.55	0.73	1.25	0.64

Note: 1 = not at all; 5 = extremely stressful.

woman who initially decided upon abortion and who later carried the pregnancy were not included in the subsequent analyses because of insufficient cell sizes.

Stress over deciding the outcome of a pregnancy. Differences in the stress of deciding the outcome of a pregnancy as a function of group status were analyzed using a 3 (group status: undecided aborter, decided aborter, or decided carrier) \times 2 (time of measurement: Time 2 and Time 3) mixed analysis of variance (ANOVA) with a repeated measure on the second variable. Table 2 lists the means and standard deviations for decision-making stress. As expected, there was an effect of group status, $F(2, 27) = 8.91, p < .001$. A Scheffé post hoc test indicated that, overall, the undecided aborters experienced significantly more decision-making stress than the decided carriers, $p < .05$. Decisional stress among decided aborters fell between that of the undecided aborters and the decided carriers; however, it did not differ statistically from either group. There was also an effect of time of measurement such that there was a decrease in decision-making stress from Time 2 to Time 3 across participants, $F(1, 27) = 7.91, p < .01$.

Emotional adjustment. Separate analyses were conducted for positive and negative affective responses to pregnancy and pregnancy decision making. Separate analyses were conducted because prior abortion research demonstrated that the two constructs are distinct because women may simultaneously hold both positive and negative feelings in response to abortion (Adler, 1975).

Differences in negative affect over time as a function of group status were examined by performing a 3 (group status: undecided aborter, decided aborter, or decided carrier) \times 3 (time of measurement: Time 1, Time 2, and Time 3) mixed ANOVA with a repeated measure on the second factor. Table 3 lists the mean ratings for negative and positive affect across time by group status. As depicted in Figure 1, the analysis on

Table 3
Negative and positive affect as a function of group status and time of measurement

Group Status	Time of Measurement					
	Time 1		Time 2		Time 3	
	M	SD	M	SD	M	SD
Undecided aborter						
Negative affect	2.89	0.74	3.26	0.49	2.03	1.07
Positive affect	1.67	0.89	1.63	0.65	2.75	1.50
Decided aborter						
Negative affect	2.80	0.94	2.62	0.78	1.73	0.55
Positive affect	1.27	0.40	1.23	0.36	3.32	1.02
Decided carrier						
Negative affect	1.84	0.57	1.75	0.46	1.87	0.50
Positive affect	3.50	0.86	3.60	1.19	3.70	1.25

Note: 1 = not at all; 5 = extremely for shortened version of the Affects Balance Scale (Derogatis, 1975).

negative affect yielded a Group Status × Time of Measurement interaction, $F(4, 52) = 5.64, p < .001$. Scheffé post hoc analyses were used to compare the three groups at each of the three times of measurement. At Time 1, the undecided aborters reported significantly more negative affect, $p < .05$, and the decided aborters reported marginally more negative affect, $p < .07$, than did the decided carriers. The two abortion groups did not differ in negative affect. Similarly, at Time 2, negative

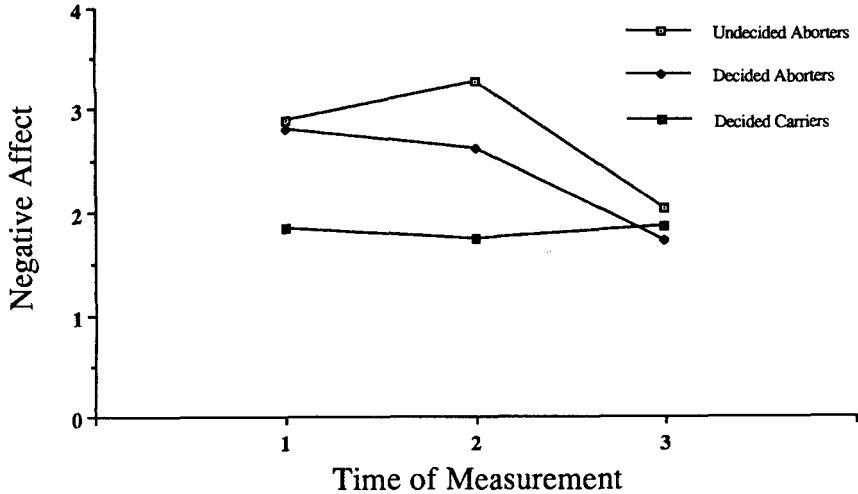


FIGURE 1. Negative affect as a function of pregnancy status and time of measurement.

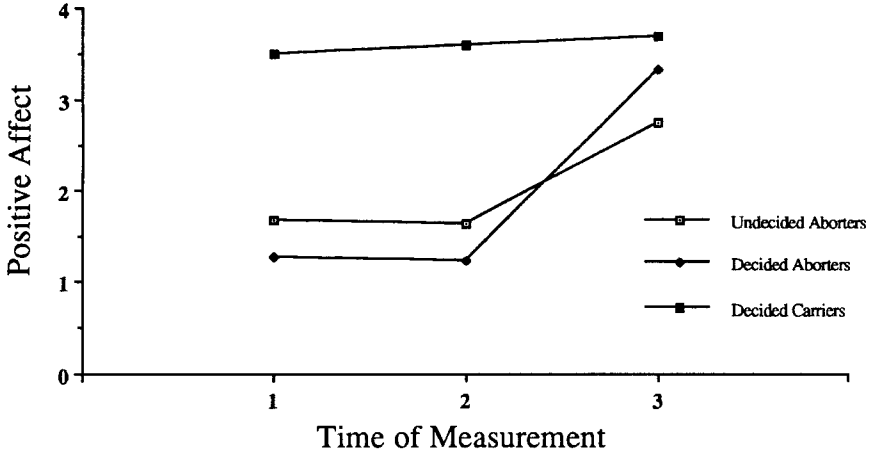


FIGURE 2. Positive affect as a function of pregnancy status and time of measurement.

affect among undecided aborters and decided aborters did not differ and was greater than that among the decided carriers, $ps < .05$. At Time 3, none of the groups differed on negative affect. Tukey post hoc tests examined negative affect within groups across time. Negative affect in the undecided aborter group increased from Time 1 to Time 2, $p < .05$, but did not increase for the decided aborter group. Both abortion groups experienced significant decreases in negative affect between Times 2 and 3, $ps < .05$. There was no change in negative affect scores across time for the decided carriers.

Differences in positive affect over time as a function of group status (Figure 2) were examined using analyses identical to those for negative affect. The pattern of results for positive affect paralleled that for negative affect. The repeated-measures ANOVA on positive affect indicated a Group Status \times Time of Measurement interaction, $F(4, 54) = 7.53$, $p < .001$. Again, Scheffé post hoc analyses compared all pairs of means at each of the times of measurement. At both Times 1 and 2, the decided carriers reported significantly more positive affect than did both abortion groups, $ps < .05$, who did not differ from each other. At Time 3, none of the groups differed on positive affect. Tukey post hoc tests were used to examine positive affect within each of the three groups over time. For both the decided aborters and undecided aborters, positive affect did not change from Time 1 to Time 2 but increased from Time 2 to Time 3, $ps < .05$. Similar to negative affect, positive affect among decided carriers did not change significantly over the three times of measurement.

Satisfaction with one's decision. Overall, all women were satisfied with their decision to either carry or abort a pregnancy. The mean values for decisional satisfaction indicated that women who aborted their pregnancies were quite satisfied, whereas women who carried were extremely satisfied. A one-way ANOVA measuring decision satisfaction at Time 3 revealed an effect of group status (undecided aborter, decided aborter, decided carrier), $F(2, 28) = 3.84, p < .05$. A Scheffé post hoc test revealed that women who were committed to carrying their pregnancies ($M = 4.90, SD = 0.32$) were marginally more satisfied with their decision 1 month after a positive pregnancy test than both the decided aborters ($M = 3.87, SD = 1.36$), $p < .09$, and the undecided aborters ($M = 3.50, SD = 1.22$), $p < .07$. Decisional satisfaction did not differ between the two abortion groups.

Social Support Sought at Time 2

A one-way ANOVA measuring the degree of social support sought regarding the pregnancy revealed no effect of group status, $F(2, 27) = 0.74$, n.s. Mean levels indicated that the undecided aborters ($M = 1.36, SD = 0.22$), decided aborters ($M = 1.14, SD = 0.86$), and decided carriers ($M = 1.56, SD = 0.94$) sought some social support regarding being pregnant during the six days prior to and the day following a positive pregnancy test.

DISCUSSION

This study examined women's adjustment to pregnancy decision making over a 4-week period beginning immediately prior to pregnancy testing. Results indicated that for the majority of pregnant and nonpregnant women in our sample, the initiation and completion of pregnancy decision making occurred prior to having a pregnancy test and learning of a pregnancy. The majority who were initially decided felt very certain of their decision. Women also felt that it was important to be able to make a choice about their pregnancy.

The women who were pregnant demonstrated a high degree of behavioral commitment to their decision; all women, except one, carried out their decisions as originally stated to either abort or carry a pregnancy. However, some of the women who chose to carry their pregnancies might have changed their decision after the completion of the study.

Reactions and adjustment to pregnancy decision making were examined among the pregnant participants as a function of whether or not a woman had made a pregnancy decision prior to pregnancy testing and of which decision was carried out. Three groups of women were compared, including women who were initially undecided about the outcome of the preg-

nancy and who later aborted, women who were initially decided upon abortion and did so, and women who were initially decided upon carrying and did so. The undecided aborters experienced more decisional stress than the decided carriers. All three groups of women expressed satisfaction with their decisions, and the decided carriers experienced even more satisfaction with their decision than did both abortion groups.

The findings regarding emotional adjustment to abortion replicated those of previous research (e.g., for a review see Adler et al., 1992) and supported our prediction that women who aborted a pregnancy would differ initially on affect from women who carried their pregnancies but that those differences would disappear over time. The women who aborted their pregnancies experienced more negative affect and less positive affect at the time of pregnancy testing and shortly after receiving the test results as compared with the women carrying their pregnancies. However, by 1 month after a positive pregnancy test, these differences abated. Women who aborted reported less negative affect and more positive affect than they reported earlier. Consequently, their reported levels of negative and positive affect were no longer reliably different than those carrying their pregnancies. This result is important because it suggests that abortion is a relatively brief stressor relatively soon after which women return to a state of affect comparable to women not experiencing abortion.

Contrary to our prediction, there were no differences among the three groups in the amount of social support sought for a possible pregnancy during the week prior to the pregnancy test and including the day following confirmation of a positive test result. One possible explanation for this result is that women may seek the most support for a pregnancy more than 1 day after it is confirmed or more than 1 week prior to pregnancy testing. In that case, the time window used to evaluate the use of social support may have been too limited to capture differences in the seeking of social support.

In conclusion, overall, there was only scant evidence that anticipatory coping, in the form of making a pregnancy decision prior to confirming a pregnancy, influences reactions and adjustment to abortion. The undecided aborters experienced an increase in negative affect after learning of a positive pregnancy test in contrast to the decided aborters and decided carriers who did not experience such an increase. However, on none of the dependent measures did the two abortion groups differ. The two abortion groups did differ, however, from the decided carriers on measures of decision satisfaction and positive and negative affect. However, the relative impact of initial decision status and final decision on decision-making stress was ambiguous because the undecided aborters differed from the decided carriers but the decided aborters did not differ from those two groups. Overall, abortion of a pregnancy appears to be a stronger predictor of women's adjustment to pregnancy decision making than is mak-

ing a decision prior to confirming a pregnancy. In the case of abortion, making a pregnancy decision prior to actual knowledge of a pregnancy may be a weak form of anticipatory coping. Making a decision before pregnancy testing contributed a little to adjustment before an abortion and to no measurable degree afterwards. Thus, women appear resilient in adjusting to pregnancy decision making, and adjustment is not greatly dependent on initial decision status. Women who are initially undecided probably draw on other personal resources to aid their adjustment to pregnancy decision making.

Our test of anticipatory coping was limited, however, by the small number of women who indicated that they were initially undecided about the outcome of the pregnancy. Differences in reactions and adjustment to pregnancy decision making may emerge with greater numbers of women who are initially undecided. Further, the definition of anticipatory coping as having made a pregnancy decision prior to pregnancy testing may not have been adequate. Anticipatory coping may influence adjustment when it involves the mental rehearsal of cognitive, emotional, and behavioral responses to a stressor. Making a pregnancy decision prior to confirmation of a pregnancy test may not involve very elaborate contemplation of coping strategies and, therefore, may not be a sufficient measure of anticipatory coping.

Another possible limitation of the study is that because of the necessary use of a volunteer sample, the women who agreed to participate may have been less distressed about a possible pregnancy than those who declined. Unfortunately, we could not test this possible difference. However, our results were congruent with past research. Further, this study did not capture the entire pregnancy decision-making process, given that the majority of women had made their decisions prior to enrollment in the study. For many women, a pregnancy decision probably is made long before there is any question of a possible pregnancy. Therefore, to more fully understand the pregnancy decision-making process, future research should involve sexually active women of child-bearing age who are not pregnant and they should be questioned about their decision in the event of a pregnancy.

Making and carrying out the decision to have an abortion in the case of an unwanted pregnancy can be acutely distressing. Our study demonstrated that women's reactions and adjustment to making and carrying out a pregnancy decision, as measured by decision-making stress, negative and positive affect, and decision satisfaction, were related most strongly to the actual resolution of the pregnancy and the passage of time and to a lesser degree to whether women were initially decided or not about the pregnancy outcome at the time of testing. Making the decision to abort a pregnancy prior to definite knowledge of a pregnancy may ameliorate some of the distress of carrying out that plan after learning of a pregnancy. Because the majority of women decided upon the outcome of the preg-

nancy even before being certain that they were pregnant, women may need support more for carrying out their decision to abort a pregnancy than for making the decision. Nonetheless, some women may need support in deciding whether to terminate a pregnancy. Overall, abortion appears to be a short-term stressor not unlike other minor surgeries or acute events in general. The women in our sample adjusted well to their pregnancy decision regardless of being initially decided or not and regardless of the eventual outcome of their decision.

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NOTE

1. Demographic features of the women measured at Time 1 were examined as predictors of the four outcome variables at Time 3, including negative affect, positive affect, pregnancy decision-making stress, and satisfaction with the decision, using correlations and analysis of variance. There were no significant relationships between age (median $r = .07$), education (median $r = -.08$), number of children (median $r = -.08$), work status (all $F_s < 1.0$), and marital status (all $F_s < 0.6$) and the four outcome variables. Therefore, these variables were not controlled in subsequent analyses.

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