


PAPER

Regret about surgical decisions among early-stage breast cancer patients: Effects of the congruence between patients' preferred and actual decision-making roles

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Abstract

Objective: Early-stage breast cancer patients generally receive either a mastectomy or a lumpectomy, either by their own choice or that of their surgeon. Sometimes, there is regret about the decision afterward. To better understand regret about surgical decisions, this study examined 2 possibilities: The first is that women who take a dominant or collaborative role in decision making about the surgery express less regret afterward. The second is that congruence between preferred role and actual role predicts less regret. We also explored whether disease stage moderates the relationship between role congruence and decisional regret.

Methods: In a cross-sectional design, 154 women diagnosed with breast cancer completed a survey assessing decisional role preference and actual decisional role, a measure of post-decision regret, and a measure of disturbances related to breast cancer treatment. Hierarchical regression was used to investigate prediction of decisional regret.

Results: Role congruence, not actual decisional role, was significantly associated with less decisional regret, independent of all the control variables. The interaction between disease stage and role congruence was also significant, showing that mismatch relates to regret only in women with more advanced disease.

Conclusions: Our findings suggest that cancer patients could benefit from tailored decision support concerning their decisional role preferences in the complex scenario of medical and personal factors during the surgical decision.

KEYWORDS

breast cancer, congruence between actual and preferred role, lumpectomy, mastectomy, oncology, regret

1 | INTRODUCTION

Early-stage breast cancer (BCa) patients are offered a choice between mastectomy or lumpectomy. Survival after lumpectomy plus radiation is the same as after mastectomy.^{1,2} Because both options are medically justified, patients must weigh the risks and benefits of each surgery on other grounds.³ After the surgery, they sometimes come to regret the decision made.^{4,5} According to a recent survey, the most common regret expressed by BCa patients are decisions associated with primary surgery.⁵ To improve pre-surgery counseling, it is pivotal to understand the variables influencing post-surgery regret and minimize it. Although

regret has received increased attention in the cancer decision-making literature,^{4,6,7} little is known about what influences decisional regret in the context of BCa surgery.

2 | APPROACHES TO DECISION MAKING

With growing recognition that cancer patients could benefit from participation in choices about their treatment, some have advocated a shared treatment decision-making model between patients and physicians.⁸ Several studies have suggested that shared decision making improves cancer patients' satisfaction with treatment and quality of

life more generally.⁹ These studies included populations with head and neck cancer⁷ and prostate cancer,⁶ as well as BCa.¹⁰⁻¹³

Although the shared decision-making model has received wide attention, some findings exist that are inconsistent with it.^{5,14} Some studies suggest that attempts to improve the quality of medical care simply by increasing participation may not prove fruitful.^{5,15} It has been suggested that efforts should also be made to ascertain the role people prefer to take in decision making and its congruence with the role they are asked to assume.^{12,13}

Pieters and Zeelenberg¹⁶ argue that *intention-behavior inconsistency* is a determinant of later regret. Building on this idea, we argue that the match between patients' preferred role and the role they actually assume is a critical influence on post-decisional regret. We propose that the greater the inconsistency between the intention (decisional role preferences) and the action (actual role taken), the higher the regret.

This view has received less attention than the shared decision-making model. Four BCa studies have explored associations between decisional role congruence and psychological outcomes. Role congruence has been linked to higher quality of life,¹⁰ greater surgical satisfaction,¹³ and lower anxiety.¹¹ Other studies, however, have found no relationship between role congruence and quality of life¹² or satisfaction with decisional process.¹¹

These studies, except that of Lantz and colleagues, did not measure regret about cancer-related decisions as an outcome. The studies generally focused on psychological morbidities or quality of life as outcomes rather than regret per se. Distinct from decision satisfaction and quality of life, regret is an aversive experience, should be avoided if possible, and involves an unfavorable evaluation of a decision and strong wishes to undo the decision.¹⁷

A further limitation of these studies is that they did not control for the outcome of the decision (ie, disturbances caused by BCa treatment). Outcome evaluation is postulated as one of the main sources of decisional regret.¹⁶ Previous studies did not assess whether patients' decision roles predict regret beyond the variance accounted by evaluations of the outcome. The study reported here addressed these limitations.

3 | OTHER CLINICAL VARIABLES ASSOCIATED WITH DECISIONAL REGRET

We are aware that some clinical characteristics are also associated with decisional regret, such as type of surgery received and stage.¹³ Uncertainty and bad outcomes incite counterfactual thinking.¹⁸ Thus, we hypothesized that stage and surgery type would moderate the relationship between role incongruence and regret. Specifically, we hypothesized that role incongruence would relate to stronger regret when disease is more serious or the surgery is more extensive. This hypothesis was exploratory.

4 | AIMS AND OVERVIEW

The current study tested hypotheses reflecting 2 competing viewpoints. The first is the model of shared decision making, which

suggests that a passive approach to decision-making process amplifies decisional regret. The second perspective, the model of intention-behavior inconsistency, purports that discrepancies between one's preferred and actual role in decision making magnify decisional regret. Testing the regret-inducing effect of role incongruence requires controlling for outcome evaluation (ie, disturbances caused by BCa treatment) and other aspects of the decision that may directly or indirectly lead to regret. It also requires testing whether role congruence is associated with regret independent of actual role taken in the decision. Finally, we explored whether role congruence is differentially associated with regret in different contexts, in this case disease stage and surgery type.

5 | METHOD

5.1 | Participants and procedures

The study sample was selected from outpatients treated for breast cancer from a medical center in central Taiwan, from 2009 to 2013. To identify all eligible women, research assistants reviewed pathology reports to identify eligible cases. Inclusion criteria included: (1) a primary diagnosis of BCa with stage 0 to II; (2) no previous BCa or other cancer diagnosis; (3) receipt of a lumpectomy or mastectomy within 36 months; and (4) completion of active cancer treatment. To constrain the influence of disease severity as a contributor to decisional regret, patients with recurrence or serious infection caused by BCa or its treatment were excluded. Moreover, to rule out women who might not be candidates for the choice between mastectomy and lumpectomy because of disease characteristics, stage II patients who had lymph node metastases or had cancer cells more than 3 cm in diameter were also excluded. Overall, the inclusion and exclusion criteria were used to target women who were offered surgical options.

All procedures were approved by the Institutional Review Board. Research assistants met eligible women after their regular clinic visits with their physicians and invited them to participate. Before inclusion, women were asked what surgery options were offered to them before they had undergone the surgery. Those who answered "only mastectomy" were excluded because they did not perceive a choice of procedure. Of the 292 women eligible to be contacted to participate in this study, 49 reported being offered mastectomy only, and 89 declined to participate. All procedures were approved by the Institutional Review Board (IRB reference number: 130408). Written informed consents were received from 154 women with early-stage BCa. The authors declare that they have no conflict of interest.

6 | MEASURES

6.1 | Decision role

Patients' preferences for surgery decision making were obtained using 2 items. The first asked how the patient would have preferred the surgical decision to have been made (preferred role). The patient chose from 3 options: "I prefer to make my own decision about which surgery I will receive"; "I prefer to select the surgery in collaboration with my

doctor"; and "I prefer to leave the decision regarding surgery to my doctor". The second asked what role the participant had actually taken when decisions were made about their BCa surgery (actual role). The 3 options were as follows: "my doctor made the surgery decision with little input from me"; "the doctor and I made the decision together on an equal basis"; and "I made the surgery decision with little input from my doctor".

Decision congruence-incongruence was coded by using both of the above variables simultaneously (see Table 1). A match between the preferred and actual roles (upper left to lower right diagonal cells) was defined as representing *congruence* and coded as 0. All other cells reflect some degree of *incongruence* and were coded as 1.*

6.2 | Regret

The Decision Regret Scale (DRS) was used to assess regret with respect to the decision to undergo mastectomy or lumpectomy.¹⁷ The DRS is a 5-item scale. We asked participants to reflect on their surgical decision and then rate each item on a 5-point scale (see Table 2). Scores for regret were calculated by reverse coding items 2 and 4 and summing across items (possible range of 5–25, with higher scores indicating greater appraisal of decisional regret). The DRS has been shown to be a valid and reliable measure of decisional regret in the context of health care decisions [Cronbach's $\alpha = 0.81$ to $0.92^{17,19,20}$]. In this study, the internal consistency (α) of the DRS was .91.

6.3 | Disturbance

Disturbances Related to Breast-Cancer Treatment (DRBCT) were measured by a questionnaire developed for this study. Thirty-two items were developed based on a review of the literature,^{13,21–24} quality of life measures specific for BCa,²⁵ focus groups with cancer survivors, and the clinical experience of the authors to assess disturbances and

discomforts commonly reported by BCa patients. The DRBCT was designed to represent major domains of BCa-related disturbances. One domain is physical symptoms or side effects related to breast cancer treatments (eg, "I am disturbed by feeling of fatigue"). The second domain is emotional distress (eg, "I feel irritated"). The third is body and self-image changes, including negative self-concept related to the changes with breast and sexual appearance (eg, "I don't feel like a whole woman"). The last domain is relationship with the partner and alteration and disturbances with the sexual relationship (eg, "I don't feel like sex is a pleasure as I used to"). Respondents indicated the extent to which they were disturbed by these changes on a scale, ranging from 1 (not at all) to 4 (very much).

Principal axis factor analysis with Promax rotation yielded a 4-factor model accounting for 61.84% of variance. Items that had a moderate to strong factor loading ($> .40$) on only 1 factor were retained (2 items were deleted at this stage). The 4 dimensions were named Emotional distress (8 items), Physical symptoms (8 items), Body/self-image disturbance (6 items), and Relationship and sexual disturbance (8 items). Responses were summed across items, with higher values indicating greater disturbance. Cronbach's α s of the 4 subscales were .83, .86, .92, and .92. Correlations among the 4 subscales ranged from .45 to .75. Because the subscales were highly correlated, and because our interest here was not in distinctions among adverse effects, only the total score was used. Cronbach's α was .94.

7 | STATISTICAL ANALYSIS

To test whether regret and treatment disturbance were associated at the bivariate level with surgery type, decisional roles (preferred and actual), and decisional role congruence, separate *t*-tests or analysis of variance (ANOVA, in the case of the 3-category variables) were carried out. Based on this, we developed a hierarchical regression model to identify factors predicting decisional regret. Stage of disease, type of

TABLE 1 Decisional role preferred and assumed, and the percentage of regret

	Role preferred							
	Active			Collaborative		Passive		Total
	Number of participants	% regret		Number of participants	% regret	Number of participants	% regret	
Role assumed								
Active	11	9		6	33	1	0	18 (11.7%)
Collaborative	15	27		68	15	14	21	97 (63.0%)
Passive	1	100		11	18	27	19	39 (25.3%)
Total	27 (17.5%)			85 (55.2%)		42 (27.3%)		154

Note. % regret = the percentage of participants expressed regret in at least 1 of the 5 items of the decision regret scale.

TABLE 2 Decision Regret Scale. The percentage is shown inside the parenthesis (%)

Statements	Extent of agreement or disagreement				
	Strongly agree (1)	Agree (2)	Neither agree/nor disagree (3)	Disagree (4)	Strongly disagree (5)
1. It was the right decision	104(67.5%)	42(27.3%)	8(5.2%)	0(0%)	0(0%)
2. I regret the decision I made	6(3.9%)	8(5.2%)	6(3.9%)	49(31.8%)	85(55.2%)
3. I would go for the same decision if I had to do it over again	91(59.1%)	45(29.26%)	13(8.4%)	3(1.9%)	2(1.3%)
4. The choice did me a lot of harm	3(1.9%)	14(9.1%)	25(16.2%)	46(29.9%)	66(42.9%)
5. The decision was a wise one	94(61%)	44(28.6%)	13(8.4%)	1(0.6%)	2(1.3%)

surgery, and any other demographic (age, education level, partnered versus single, income status, and having children versus not) or clinical variable (time since surgery, breast constructive surgery received, and the adjuvant treatment received) that was significantly related to decisional regret were included in the regression model in the first step. The DRBCT score was entered in the second step. The actual decisional role was treated as an ordinal-scaled variable of degree of personal involvement in decision making, coded as 1 (doctor), 2 (collaborative), and 3 (self), and entered in the third step. Decisional role congruence was entered in the fourth step. In the last step, the interactions between disease stage and role congruence, and type of surgery and role congruence were entered. All continuous predictors were centered prior to entry in the model. When interaction terms were significant, simple slope analyses were conducted following Aiken and West.²⁶

8 | RESULTS

Of the 154 women in this study, 22 had been diagnosed with Stage 0, 60 Stage I, and 72 Stage II BCa. Most were married or otherwise partnered (77.3%). Average age was 46.69 years ($SD = 9.64$; range 23–63 years). Education was 27.9% less than high school, 66.2% high school or college graduate, and 5.8% postgraduate degree. Average education level was 12.66 years ($SD = 3.09$). The median of time since surgery was 18 months. Fifty-eight percent of the women had lumpectomies; 42% had mastectomies. Only 9 (5.8%) had breast constructive surgery. More than half of these long-term survivors had received radiation (63.6%), chemotherapy (62.3%), and hormonal adjuvant therapy (72.7%).

The mean score on the DRS for the study sample was 8.10 ($SD = 3.24$). Overall, our sample reported low rates of decisional regret. The percentage agreement for each statement on the DRS was shown in Table 2. Only 9.1% and 11.0% reported either “strongly agree” or “agree” to the statements of “I regret the decision I made” and “The choice did me a lot of harm”.

In bivariate comparisons pertaining to regret, decisional role congruence (ie, being more engaged in decision making than they preferred, congruent, or less engaged in decision making than they preferred) was significantly related to regret, $F(2, 151) = 4.06$, $P = .02$. Post hoc comparisons (Fisher's LSD) revealed that those reporting decisional role congruence reported significantly less regret ($M = 7.66$, $SD = 3.12$) than those who reported either kind of decisional role incongruence, but women who reported their actual roles as more engaged than preferred (the upper triangle of Table 1, $M = 9.24$, $SD = 3.46$) were not significantly different from those who reported being less engaged than preferred (the lower triangle of Table 1, $M = 9.26$, $SD = 3.34$).

Separately, women who underwent lumpectomy ($M = 7.61$, $SD = 3.11$) reported significantly less regret than those who underwent mastectomy ($M = 8.91$, $SD = 3.36$), $t(152) = 2.48$, $P = .01$. However, neither the patients' actual role ($M = 8.44$, 7.99, 8.44, $SD = 3.94$, 3.01, 3.61, for Active, Collaborative, Passive roles) nor the preferred role ($M = 8.56$, 8.02, 8.17, $SD = 3.53$, 3.14, 3.42, for Active, Collaborative, Passive roles) was associated with decisional regret in itself, $F(2,$

TABLE 3 Results of the hierarchical regression analysis

	Predictors	β	ΔR^2
Step 1	Disease stage	.10	10.9%
	Type of surgery	.13	
	Treatment disturbances	.24**	
Step 2	Actual role	-.04	0.1%
Step 3	Decisional role congruence	.23**	5.3%
Step 4	Stage \times role congruence	.29**	5.4%
	Surgery type \times role congruence	-.08	
Total			21.7%

Note.

** $P < .01$.

151) = 0.34, 0.27, $P > .05$. Decisional regret was significantly correlated with stage of disease ($r = .16$, $P = .05$), but not with any other demographic or clinical variable.

In bivariate comparisons pertaining to disturbance, there was no difference in disturbance scores by actual role, preferred role, or decisional role congruence, but women who underwent lumpectomy ($M = 20.25$, $SD = 15.50$) reported significantly less disturbance than those who underwent mastectomy ($M = 27.27$, $SD = 19.65$), $t(152) = 2.48$, $P = .01$. There was also a significant correlation between disturbance scores and regret ($r = .27$, $P = .001$).

8.1 | Regression model

Given these bivariate associations, a hierarchical regression model was constructed controlling for stage of disease, surgery type, and treatment disturbance. This model was used to examine whether actual decisional role or decisional role congruence predicted decisional regret, and whether stage or surgery type interacts with role congruence in predicting regret. Because the effect of role incongruence had been shown to be symmetrical, congruence was dichotomized (congruent versus incongruent).

The results of this hierarchical regression are presented in Table 3. Neither disease stage nor type of surgery was significantly associated with regret on step one. Treatment disturbance was the only significant predictor in this step. More treatment disturbances were associated with greater regret. Step 2 revealed that the decisional role actually taken did not predict regret. In step 3, decisional role congruence significantly predicted lower decisional regret above and beyond all the covariates.[†] In step 4, the interaction term between congruence and disease stage significantly predicted decisional regret, above and beyond all the covariates, though the interaction between congruence and type of surgery was not significant. (Role congruence remained as a significant predictor at this step, $\beta = .27$, $P = .008$.) The simple effects making up the significant interaction were examined, controlling for the same covariates (see Figure 1). Among women with stage 0 or I disease, the slopes of regret as a function of role incongruence did not differ from zero; at stage II, this association was significant. This suggests that regret increased with decisional role incongruence among only stage II women.

9 | DISCUSSION

This is the first study to examine whether congruence between preferred and actual role in decision making pertaining to surgery for BCa is related to decisional regret after the surgery. The findings indicate that women whose decisional roles were congruent were less likely to report regret over the decision than women whose decisional roles were incongruent. Controlling for disease stage, surgery types, disturbances related to breast-cancer treatment, and actual decision-making role, decisional role congruence remained a salient predictor of decisional regret. The results of this study support the model of intention-behavior inconsistency as a determinant of regret.⁸

We also found that discrepancy between preferred and actual roles is a more robust predictor of decisional regret when disease stage is higher (stage II in this study). Put differently, role congruence mattered more among women with higher stage than those with lower stage cancer. Women who experience role incongruence may need strong justification to prevent feeling regret. Role incongruence could induce a situation that is unpredictable and tension-generated,¹⁶ making counterfactual thinking more accessible. With higher stage cancer, women may face more uncertainty and correspondingly less justification for the decision made about procedure. This would suggest that when there is greater fear of recurrence, decisional regret is more likely.

It is of interest that neither the actual decisional role nor the preferred decisional role by themselves related to decisional regret. These findings are inconsistent with the shared decision-making model,^{8,9} which emphasizes the importance of patients' participating in decision making and predicts that women with active or collaborative involvement in decision making experience less regret than women who delegate treatment decision making to their physicians. One other study has also found that role congruence, not actual role, was related to less anxiety in cancer patients.¹¹

Why was the shared decision-making model not supported in this study? One possibility may reflect cultural factors. In Chinese culture, the physician is an authority figure who has knowledge and is viewed as one who probably can control the illness. Previous studies have found that Taiwanese patients use "vicarious control"²⁷ in coping with illness. That is, patients exert control by delegating decision making to their physicians and thus choose not to decide (eg, I submit myself to the doctor's order is the way I take care of my health²⁸). Indeed, even in western culture, some patients prefer to relinquish decisional

control and defer to their health care team, particularly if they have a potentially fatal disease such as BCa.²⁹ It may be that preference for a dominant or collaborative role in decision making is more often expressed by patients with less destructive diseases, and this preference is less important in threatening and distressing medical conditions.¹¹ Finally, patients may express autonomy by actively seeking information, but not necessarily wanting to participate in decision making.²⁹ All the above reasons indicate that although the shared decision-making model is important for physicians to consider in counseling patients, it is also critical to consider patients' preferred decision-making roles.

It is worth mentioning that the perceptions of both the role preference and role assumed are being recalled across a distant range of time (ranged from 3 to 36 months) after the lumpectomy or mastectomy. It is possible that patients who had better surgical satisfaction (ie, less regret) tended to attribute the successful outcome to decisional role congruence rather than being engaged in shared decision making. Moreover, the assumed role was not measured by physicians' reports. These limitations might have contributed to the lack of significant findings in support for shared decision-making model in our analyses.

Our findings differ from those of Lanz and colleagues,¹³ which found that women whose surgeon made the decision alone experienced greater decisional regret. Beyond cultural differences in treatment experiences, differences between the 2 studies' populations and controlled variables might also explain this disparity. Lanz and colleagues' study used a sample including many more patients with diagnosis of ductal carcinoma in situ (DCIS) than our sample. Furthermore, we controlled for BCa treatment-related disturbances, while the study by Lanz and colleagues did not. In our study, disturbance related to BCa treatment was a strong independent predictor of regret—in accordance with the view that negative outcomes fuel counterfactual thinking, amplifying experience of regret.^{16,30} Failure to take into account treatment-related disturbances may obscure the relationship between the decisional process and regret.

Our results suggest that women who assumed a passive role did not report greater regret than women who assumed a collaborative role or an active role. Based on previous research, age and education are predictors of role preference in medical decision making.³¹ However, in our study, age and education level were not correlated with patients' role preference. The present sample reported fairly high education levels (72% had at least high school degree) and young age (95% at age between 30 and 60), reducing the ability to generalize to women across education levels and age. As older and less well-educated patients are more likely to prefer the passive roles, our sample could reflect a population less likely to favor passive roles.

This study extends the literature by contrasting 2 possible predictors of regret. The study identified a detrimental effect of mismatching roles. It is not our intent to dispute the benefits of shared decision making. However, the results presented here suggest that it would be beneficial for physicians to be more sensitive to patients' decisional role preferences, especially to the subgroup of patients with higher stage. Although a considerable proportion of women can benefit from increased participation, imposing decision-making power on patients who prefer to entrust decisions to physicians could be detrimental.

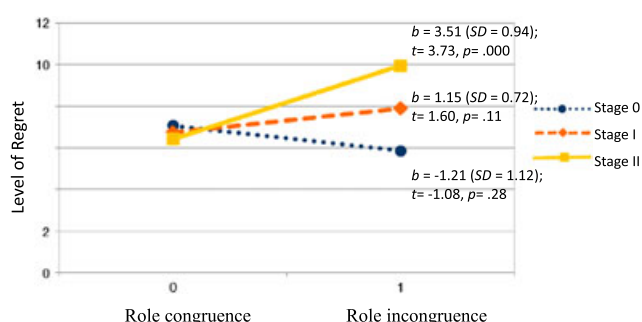


FIGURE 1 Relationship between role congruence and regret for participants with stage 0, I, and II

Tailored involvement to women's desired levels could increase the quality of cancer care.

Systematic reviews have indicated that while patients more frequently prefer shared decision making, a proportion of patients would rather be passive and delegate a decision to the health care provider. Literature has cautioned practitioners not to assume patients should prefer shared decision making. In fact, there are several factors accounting for why patients may not prefer a shared decision-making working model. Beyond age and education, which we discussed earlier, patients' preferences are influenced by time constraints, health status, the amount of knowledge they have (eg, I don't know as much as the doctor), attitude towards involvement (eg, I shall be a good patient), and the interactions they experienced with health care provider.³² Health care providers should be aware of these barriers and assess patients' preferences for decision making roles. Another critical factor that should be assessed is caregivers' involvement. Patients and their caregivers may differ in how they value surgical options.³³ Patient autonomy will depend upon the relationship with their caregivers. It is essential that future studies investigate carers' decision-making role preference alongside patients'. Our findings advocate a patient-centered care, which emphasizes that health care providers should be aware of their patients' preferences for involvement in surgical decision making.

9.1 | Study limitations

Given the cross-sectional nature of the study, the results show associations between regret and decisional role factors rather than causal links. Future research should extend the results by using a prospective design, investigating whether the decisional roles (actual, preferred, and congruence) reported right after the decision is made predict later regret. Second, this study relied on women's recall of the decisional process that took place in the beginning of their treatment course. This raises the possibility of retrospective distortion. However, women's appraisals in regard to decisional regret have been mainly affected by current health status or outcomes of the decision,³⁴ which we controlled in this study. It is worth noting that the current sample did not include patients who had a recurrence because we restricted inclusion to women with Stage 0 to II disease. We reasoned that women with recurrent disease may report greater regret being impacted by their current disease. It would be interesting to examine if the regret experience differs between relapsers and non-relapsers. More data are needed to examine how involvement in decision making in women with more advanced cancers affects their sense of regret over other treatments (eg, chemotherapy) in survivorship.

Another limitation of this study is that only 22% of the variance in regret was explained in the regression model. Other variables accounting for decisional regret, including the amount of information being processed¹⁶ or patients' characteristics such as pessimism, were not measured, thereby precluding a full understanding of decisional regret. Future work can benefit by adding other critical factors (eg, coping style, social support) accounting for variance in regret.

Finally, there was little expression of regret in this study, consistent with previous studies.^{13,21} The low reporting of regret makes regret harder to test our hypotheses due to the limited range of the outcome variable in this population. Recruiting samples more likely to

vary along the full range of surgical regret would be helpful in future work. This may involve widening the recruitment sources to different forms of healthcare delivery (eg, hospitals, private practice, community health centers) or including women with Stage III BCa. It is also possible that women were hesitant to express regret that they actually felt and under-reported on our self-report instruments. Future efforts should therefore consider using interviews to assess regret.

9.2 | Clinical implications

This study contributes to the literature bearing on cancer patient participation in surgical decision making. Our findings indicate that in the context of surgical treatment for early-stage BCa it is important for physicians to consider the patient's preference about her decisional role. Physicians should be sensitive to the fact that not all patients want to play a leading role in an important but complex medical decision, and that being compelled to do so could increase the likelihood of subsequent regret.

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ENDNOTES

* Note in Table 1 that there were 2 instances of 2 steps of incongruence. All other cases were either congruent or differed by only 1 step. This issue is addressed in the results section.

† Recall that 2 women had reported 2 steps of incongruence. In the analyses reported here, these women were combined with those reporting only 1 step of incongruence (Table 1). Analyses in which these two women were coded 2 and those with 1 step of incongruence were coded 1 yielded a similar effect of role incongruence, $\beta = .24, p < .001$. Because the 2-step incongruent subsample is quite small, we consider this analysis exploratory.

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