Chapter 13 Everyday Attitudes About Euthanasia and the Slippery Slope Argument

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Abstract This chapter provides empirical evidence about everyday attitudes concerning euthanasia. These attitudes have important implications for some ethical arguments about euthanasia. Two experiments suggested that some different descriptions of euthanasia have modest effects on people's moral permissibility judgments regarding euthanasia. Experiment 1 (N = 422) used two different types of materials (scenarios and scales) and found that describing euthanasia differently ('euthanasia', 'aid in dying', and 'physician assisted suicide') had modest effects ($\approx 3~\%$ of the total variance) on permissibility judgments. These effects were largely replicated in Experiment 2 (N = 409). However, in Experiment 2, judgments about euthanasia's moral permissibility were best predicted by the voluntariness of the treatment. Voluntariness was a stronger predictor than some demographic factors and some domain general elements of moral judgments. These results help inform some debates about the moral permissibility of euthanasia (e.g., the slippery slope argument) suggesting that some of the key premises of those arguments are unwarranted.

13.1 Introduction

In the United States, voluntary passive euthanasia is often thought to be both legally and morally permissible. One reason for the permissibility of voluntary passive euthanasia is that it promotes the two main goals of contemporary medical decision making in the United States—protecting patient autonomy and promoting patient well-being. Allowing the patient to die can respect the patient's wishes and could result in promoting patient well-being by preventing unavoidable future suffering. However, other types of euthanasia are often thought to be immoral and are

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illegal in many parts of the world. For instance, the American Medical Association does not condone actively taking steps to end a patient's life (i.e., active euthanasia) ("Decisions near the end of life. Council on Ethical and Judicial Affairs, American Medical Association," 1992). The conflict concerning the ethical, legal, and procedural permissibility of some types of euthanasia is also reflected in the philosophical literature. Some argue that some kinds of euthanasia are sometimes morally permissible, others argue that those same kinds of euthanasia are not morally permissible (Battin 2005; Beauchamp 2006; Brock 1992; Jackson and Keown 2012; McLachlan 2010; Raz 2013; Velleman 1992).

While the correct ethical, legal, and procedural views about euthanasia are important, weighing in on those debates is not the primary goal of this paper. Rather, there is a more modest goal. Parties to the debate often give detailed and nuanced arguments about the permissibility of different kinds of euthanasia (see, for example, some of the chapters in this volume). While these arguments are philosophically rich, they often reference everyday thought, attitudes, or other empirically discoverable facts about whether some kinds of euthanasia are permissible. For example, some have argued that allowing voluntary active euthanasia would result in a slippery slope toward other, less morally permissible forms of euthanasia (e.g., involuntary active euthanasia). In its empirical form, the slippery slope is most efficiently and perhaps best addressed by using empirical methods. Does allowing some kinds of euthanasia *actually* lead to an acceptance of other less ethically desirable kinds of euthanasia?

The overarching aim of this chapter is to provide evidence about everyday attitudes concerning euthanasia by addressing two main issues. The first issue involved measuring the extent to which different ways of characterizing euthanasia (e.g., 'assisted suicide' versus 'aid in dying') influence everyday attitudes about the morality of those practices. Results from the two experiments suggested that the effect of description is real but small. The second issue involved predicting everyday attitudes about euthanasia. One of the major factors predicting judgments about the moral permissibility of euthanasia was the voluntariness of the decision. Voluntariness predicted attitudes independently of other demographic variables and some domain general components of moral cognition. These results not only provide additional evidence about everyday attitudes about euthanasia's moral permissibility, they also help inform some philosophical arguments about the ethics of euthanasia's (e.g., the slippery slope argument). These results suggest that a key empirical premise in the slippery slope argument against euthanasia is false. People who accept some forms of euthanasia simply are not led to accept other, more morally objectionable forms of euthanasia.

13.2 Euthanasia: Philosophical and Empirical Work

Generally, it is agreed that there are at least six conceptually distinct kinds of euthanasia. Euthanasia can be passive (allowing a patient do die) or active (actively taking steps to end a patient's life). Euthanasia can also be voluntary

(the procedure is requested), non-voluntary (the patient is unable to request the procedure), or involuntary (the patient does not want the procedure). Crossing these two categories of euthanasia produces six distinct kinds of euthanasia (e.g., voluntary active euthanasia) (Brock 1992).

There is a growing body of empirical research about attitudes toward euthanasia (Achille and Ogloff 1997; DeCesare 2000; Domino 2002; Emanuel 2002; Gamliel 2013; Genuis et al. 1994; Ho and Penney 1992; Jorgenson and Neubecker 1981; MacDonald 1998; Ostheimer 1980; Parkinson et al. 2005; Rogers 1996; Singh 1979; Verbakel et al. 2009; Wolfe et al. 1999). Unfortunately there are some common conceptual problems and ambiguities that make interpreting the ethical significance of these empirical data difficult (Rogers 1996; Wasserman et al. 2005).

First, there are definitional confusions about euthanasia. For example, the AMA defines 'euthanasia' as "the administering of a lethal agent by another person to a patient for the purpose of relieving the patient's intolerable and incurable suffering" ("Decisions near the end of life. Council on Ethical and Judicial Affairs, American Medical Association," 1992). This definition clearly involves active euthanasia only. On this definition, all passive ways to end life are not part of the definition of 'euthanasia'. More than that, the AMA's definition does not reference the voluntariness of the euthanasia. These ambiguities also occur in many experimental explorations of attitudes toward euthanasia. For example, in one study, participants were instructed to rate whether practices indicated by a word on a card were justified. One of the words was 'euthanasia' (Verbakel et al. 2009). It is unclear which, if any, of the six general notions of euthanasia participants thought 'euthanasia' referred to.

Second, terms may be appropriately disambiguated yet impermissible inferences are made to euthanasia in general. For example, The National Opinion Research Center has one prominent question that has been analyzed a number of times (DeCesare 2000; Jorgenson and Neubecker 1981; Ostheimer 1980; Singh 1979): "When a person has a disease that cannot be cured, do you think doctors should be allowed to end the patient's life by some painless means if the patient and his family request it?". This question clearly focuses on voluntary euthanasia and is naturally (although not necessarily) interpreted as actively ending a patient's life as opposed to allowing the patient's life to end. The other five types of euthanasia are left unexplored by this question. Since this procedure constitutes just one kind of euthanasia, it is impermissible (or at least risky) to infer that answers to this question reflect attitudes about euthanasia *in general* or to make inferences about the moral permissibility of some other types of euthanasia.

Finally, kinds of euthanasia can be nested, yet the nested nature is not noticed or is glossed. For example, questions of euthanasia are also discussed under the rubric of "physician assisted death." Though this is not always acknowledged or made clear, physician assisted death divides into two "species." In physician assisted suicide, the patient is the one who actually administers the deadly treatment whereas in voluntary active euthanasia the agent who initiates the lethal treatment is typically a doctor (Brock 1992, 10). If there is this conceptual and practical distinction, one might think that physician assisted suicide is an

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acceptable form of physician assisted death but voluntary active euthanasia is not. Or one might think that killing one's self is not permissible but having a professional do it might be. So, one could think that one type of physician assisted death is permissible, but not both types of physician assisted death.

Theorists can avoid many of these problems by stipulating definitions of euthanasia. But, not paying attention to these conceptual distinctions is risky. These conceptual confusions raise the possibility that attitudes toward euthanasia are confounded by terminology rather than assessing core issues about euthanasia—a phenomenon that is similar to the psychological effect known as framing. Typically, framing occurs when apparently logically identical, but different, descriptions of a choice elicit different decisions (for a review, see Levin et al. 1998). The classic example of framing is Tversky and Kahneman's (1981) Asian Flu case. In this case, participants were asked to decide between two programs to combat a new Asian Flu that will affect up to 600 people. Participants could choose program A that would save 200 lives for sure, or program B that has a 1/3 chance of saving everybody and a 2/3 chance of saving nobody. A different group of participants received a similar description but their choices were between program C where 400 people will *die* for sure and program D where there is a 1/3 chance nobody dies and a 2/3 chance everybody dies. On the surface, these two descriptions are logically identical. However, in the "save" condition, 72 % took that less risky program A whereas in the "die" condition 78 % took the more risky program D. One explanation for this phenomenon is that people become risk averse in the "gain frame" to lock in the desirable outcome, whereas people become risk seeking in the "loss frame" to have a chance of avoiding the negative outcome.

Similar framing may happen when using different terminology to refer to euthanasia. To illustrate, "physician assisted suicide" may focus people's attention on a specific type of goal—suicide. One may be inclined under this description to avoid that undesirable goal thereby increasing the odds that one judges it morally impermissible. Another description that may be logically identical to physician assisted suicide is "aid in dying." 'Aid' may focus attention on a very different goal that is evaluated as more favorable. Given that favorable evaluation, one may be more inclined to obtain that positive goal and thus judge the action morally permissible. If physician assisted suicide and aid in dying refer to the very same thing, then perhaps describing the type of euthanasia one way may generate a very different reaction compared to describing euthanasia in a logically identical, alternative way. ¹

Some data suggest that different descriptions of euthanasia can influence judgments about the legality of euthanasia (Barry 2007). A 1997 public opinion poll conducted by Princeton University found that 45 % of people responded 'yes' to

¹It is unclear whether these two descriptions really are logically identical. Even if they are not logically identical, it is an open question whether attitudes about them vary sufficiently for there to be an empirical distinction between the two. See discussion.

the following question "Do you think that it should be legal for a doctor to help a terminally ill patient commit suicide, or not?". However, a poll conducted by Louis Harris and Associates found that 69 % of people responded 'yes' to the following question "Do you think that the law should allow doctors to comply with the wishes of a dying patient in severe distress who ask to have his or her life ended, or not?" (Barry 2007). On the face of it, the only substantive difference between the two questions is whether it should be legal for doctors to help patients commit 'suicide' or respect patients' wishes to end their life. This small difference saw the majority of people disagree that the former should be legal while the majority thought the latter should be legal. Others have found a similar difference comparing different measures of euthanasia and physician assisted suicide (Hains and Hulbert-Williams 2013).

There are subtle but possibly important differences in the wording of the questions in the two polls, making interpretation of direct comparisons difficult. Huber et al. (1992) provide more systematic and direct evidence. Their studies suggest that there are important differences between end of life decisions described as 'euthanasia', 'mercy killing', 'physician assisted suicide', and 'some form of control over death'. They asked participants "If adequate safeguards could be developed, would you like to see (one of the four terms) legalized?" (Huber et al. 1992, 7). Averaging across all four descriptions, 64 % of people thought that these treatments should be legalized. However, there was variability associated with different descriptions. More people thought that euthanasia should be legalized (about 78 %) compared to physician assisted suicide (about 40 %). These results suggest that the description can have an impact on judgments about whether euthanasia should be legalized.

These studies highlight some difficulties in assessing everyday attitudes about the moral permissibility of euthanasia. First, there are conceptual problems. Terms used in existing studies are often not sufficiently clear to measure the relevant attitudes. Second, studies often measure the legality and not morality of euthanasia. It is sometimes difficult to infer moral permissibility from legality. For example, one could think that euthanasia should be legal while at the same time think it is morally impermissible. Even if there is likely to be some correlation between many legal and moral judgments, the strength of that relation remains unknown. Third, most of the research about wording does not directly compare responses in the same studies or samples. The one study that does relies on one question that may have questionable reliability and that requires replication. Finally, given that there are ambiguous and varied descriptions of end of life decisions involving death, framing effects may influence some judgments about the moral permissibility of those decisions.

These conceptual and empirical issues are important for assessing and interpreting some arguments about euthanasia. The slippery slope argument will serve as an illustrative example. The slippery slope argument is often presented in a logical or an empirical form (see Lewis 2007 for an overview). On both versions, accepting some, perhaps morally permissible, version of euthanasia would lead one either conceptually or empirically to accept less morally permissible versions.

For example, on the conceptual version, people may not be able to fully appreciate the conceptual difference between non-voluntary and involuntary euthanasia once they have already accepted non-voluntary euthanasia. Or, on the empirical version, accepting some forms of euthanasia would *cause* one to accept other definitions of euthanasia—or at least endorse practices that are consistent with those morally objectionable types of euthanasia. So the slippery slope arguments have key premises that, in fact, people (a) do not appreciate conceptual distinctions among types of euthanasia once they accept some types of euthanasia, or (b) accepting some types of euthanasia causes people to accept other types of euthanasia.

Unfortunately, the current state of the science does not help much to address either (a) or (b). Conceptual problems make it difficult to interpret whether those who endorse some acceptable forms of euthanasia see no conceptual distinction between less acceptable forms of euthanasia. Relatedly, given the conceptual problems in the currently existing empirical data, it is difficult to understand any of the causal relations among those definitions. Finally, different ways to frame euthanasia could give divergent evidence for (a) and (b). Theoretically, if one focuses on positive aspects (e.g., "aid in dying") one may find fuller endorsement of all types of euthanasia compared to negative frames for euthanasia (e.g., "physician assisted suicide"). The former may support slippery slope arguments while the latter may not. Without knowing the extent of the influence of framing, it will be difficult to interpret people's core attitudes about euthanasia. To fully address (a) and (b), new data are required. Experiments 1 and 2 were designed to help provide some of these data.

13.3 Experiment 1

Experiment 1 had three different goals. The first was to measure the effect of different descriptions of end of life decisions on the moral permissibility of those decisions. This was done using two different kinds of materials. The first set of materials was scenarios that systematically altered the description of the end of life decision. The second set of materials involved scales that systematically altered the description of the end of life decision. Based on previous research, it was predicted that the most morally permissible action would be described as "aid in dying." The least morally permissible treatment would be described as "physician assisted suicide." Treatments described as 'euthanasia' were predicted to be morally permissible, but not as acceptable as aid in dying since "aid in dying" is a proper subset of euthanasia in general (euthanasia could be interpreted in one of its less acceptable forms, i.e., involuntary active euthanasia).

13.3.1 Participants

Four hundred and twenty-two participants were recruited from Amazon's Mechanical Turk.² Twenty-five participants were excluded for not completing the survey. One participant was excluded for reporting an age less than 18. The mean age was 35.59, SD = 12.9 ranging from 18–79. Fifty-six percent (N = 223) were women.

13.3.2 Materials

The scenarios were inspired by those developed by Frileux et al. (2003). Their scenarios focused on physician assisted suicide and euthanasia. Their data suggested that generally, physician assisted suicide is less preferred than euthanasia. In addition, their data suggested that requests for euthanasia were one of the primary factors in whether the treatment was acceptable (along with age of patient, mental health, and prognosis). Their scenarios were modified in this experiment to include a description of "aid in dying" in addition to descriptions of physician assisted suicide and euthanasia. Finally, the scenarios were modified to make the non-voluntary versus voluntary nature of the decision clear (see Appendix for the actual text of all six scenarios). Participants responded to the moral permissibility of the procedure on a 6-point scale (1 = strongly disagree, 6 = strongly agree).

The second set of materials involved scales composed of 11 items concerning euthanasia, physician assisted suicide, and aid in dying (see Appendix for full scales). Participants responded to each prompt on a 6-point scale (1 = strongly disagree, 6 = strongly agree). These scales were based on Roger's (1996) scale that measured attitudes about euthanasia. The basic methodology was adopted from Kemmelmeier et al. (1999) who systematically changed 'euthanasia' to 'physician assisted suicide' in each of Roger's scale items that had 'euthanasia' in it. In addition to systematically altering 'euthanasia' to 'physician assisted suicide', one scale also used the phrase 'aid in dying'. Scales were used in addition to scenarios because one-item measures can be of limited validity. Many extraneous factors, question wordings, or other features idiosyncratic to the scenario or question

²For an overview of the quality of Amazon Mechanical Turk's participants, see Buhrmester et al. (2011), Paollacci et al. (2010).

³It may seem somewhat forced to include the category "non-voluntary physician assisted suicide" since physician assisted suicide is typically taken to be a kind of voluntary, active euthanasia. In the non-voluntary scenario, the wishes of the patient are left unspecified so one cannot be sure if the patient volunteers for the treatment. Alternatively, the patient may be understood to be functioning, yet incompetent (hence, not able to give adequate consent).

⁴Kemmelmeier et al. (1999) did not gather data on the 'euthanasia' scale, so direct comparisons between the two scales was not possible.

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may influence participants' responses. Instruments with more than one question allow assessing the degree of internal reliability of responses. If items measure roughly the same underlying construct, then the internal reliability of the scale should be relatively high. In this way, the scales provide an additional source of evidence that can converge with evidence from the scenarios.

Participants first answered each of the three scales for euthanasia, physician assisted suicide, and aid in dying (counter balanced for order). Participants then were randomly assigned to only one of the six scenarios. Next, participants completed the Ten Item Personality Inventory (TIPI) (Gosling et al. 2003). The TIPI is a brief, 10-item measure of the Big Five personality traits extraversion, openness to experience, emotional stability, agreeableness, and conscientiousness. Next, participants completed the Berlin Numeracy Test (BNT) (Cokely et al. 2012). The BNT is a brief measure of the ability to understand and use statistical information and has been related to increased focus, attention, and some normatively correct choices. Finally, basic demographic information was collected including a brief measure of political orientation: "Here is a seven point scale on which political views people might hold are arranged from extremely liberal to extremely conservative. Where would you place yourself on this scale" (1 = extremely liberal,4 = moderate, 7 = extremely conservative). This measure of political orientation is an efficient and reliable way to measure general political orientations (Kroh 2007).

13.3.3 Results

13.3.3.1 Scenarios

Scenarios were analyzed first. Means and standard deviations for the 6 scenarios are reported in Table 13.1.

An Analysis of Variance (ANOVA) with the different scenarios as the independent variable and responses to the permissibility question as the dependent variable showed an overall difference between scenarios F (5, 390) = 20.43, p < 0.001, η_p^2 = 0.21. There was no main effect of sex F < 1, and sex did not reliably interact with judgments F (5, 384) = 1.67, p = 0.14, η_p^2 = 0.02. Because sex was not reliably related to judgments and for ease of analyses, sex was excluded as an independent variable for all subsequent analyses.

Planned comparisons with voluntariness as the independent variable and responses to the permissibility question as the dependent variable revealed

Table 13.1 Means and standard deviations from scenarios in Experiment 1

| Non-voluntary | Voluntary |

	Non-voluntary	Voluntary
Euthanasia	N = 57, M = 3, SD = 1.91	N = 61, M = 4.67, SD = 1.42
PAS	N = 62, M = 2.95, SD = 1.83	N = 74, M = 4.5, SD = 1.8
Aid in dying	N = 73, M = 3.14, SD = 1.86	N = 69, M = 5.04, SD = 1.33

an overall difference between non-voluntary (M=3.04, SD=1.86) and voluntary (M=4.74, SD=1.55) conditions, F(1,394)=96.93, p<0.001, $\eta_p^2=0.2$. Pairwise comparisons were next performed for each type of end of life decision (euthanasia, PAS, and aid in dying) to determine the effect of voluntariness on judgments of permissibility. These analyses revealed large overall differences in judgments as a function of voluntariness: Euthanasia, F(1,116)=29.37, p<0.001, $\eta_p^2=0.2$, physician assisted suicide F(1,134)=24.56, p<0.001, $\eta_p^2=0.16$, aid in dying F(1,140)=48.85, p<0.001, $\eta_p^2=0.26$.

Finally, analyses were conducted to determine differences in judgments of permissibility as a function of the description. There were no detectable differences in permissibility judgments for non-voluntary descriptions of euthanasia, Fs < 1. There was a significant difference between voluntary physician assisted suicide and voluntary aid in dying F(1, 141) = 4.16, p = 0.04, $\eta_p^2 = 0.03$. There was no reliable difference between voluntary euthanasia and voluntary physician assisted suicide, F < 1. There was no reliable difference between voluntary euthanasia and voluntary aid in dying F(1, 128) = 2.36, p = 0.13, $\eta_p^2 = 0.02$.

Correlations among the dependent variables for the scenarios are reported in Table 13.2. There were no systematic relations between the permissibility question and these demographic factors.

13.3.3.2 Scales

The mean responses and internal reliabilities were similar for the euthanasia scale $(M=4.11, SD=1.23, \alpha=0.92)$, physician assisted suicide scale $(M=4.11, SD=1.28, \alpha=0.92)$ and aid in dying scale $(M=4.22, SD=1.18, \alpha=0.91)$. A mixed-model ANOVA with responses to the three scales as within subjects factors and order of presentation as between subjects factors revealed an overall small

Table 13.2	Correlations for scenarios Experiment 1

	Euthanasia					
	Non- voluntary	Euthanasia voluntary	PAS non- voluntary	PAS voluntary	Aid non- voluntary	Aid voluntary
BNT	0.08	-0.03	-0.17	0.02	-0.02	-0.01
Extraversion	0.19	0.08	-0.06	-0.04	0.2	-0.26*
Agreeableness	0.05	0.14	-0.12	-0.03	-0.08	-0.12
Conscientiousness	-0.04	0.12	-0.05	-0.06	-0.04	0.2
Emotional	0.06	-0.02	0.03	-0.08	0.02	0.13
Openness	-0.15	0.12	0	0.12	-0.03	0.12
Age	-0.05	0.13	-0.17	0.06	-0.17	0.15
Gender	0.08	0.18	0.03	-0.21	-0.22	-0.04
Politics	0.1	-0.16	0.07	-0.37**	-0.14	-0.21
Area	0.23	0.06	-0.24*	0.03	0.09	-0.13

^{*}p < .05

^{**}p < .01

effect of description F(2, 392) = 7.33, p = 0.001, $\eta_p^2 = 0.02$. However, this effect was qualified by an interaction of order of presentation F(2, 393) = 6.04, p < 0.001, $\eta_p^2 = 0.03$. To control for the order effect, only first responses were analyzed. An ANOVA revealed no overall difference among first responses F < 1.

Correlations among the dependent variables are reported in Table 13.3. Political orientation predicted permissibility to all three scales. No other reliable relations to the three scales were found.

13.4 Experiment 2

Experiment 1 suggested that there were some modest effects of description on people's judgments of euthanasia's moral permissibility. However, there seemed to be remarkable consistency among judgments. For example, there were strong correlations between responses to the scaled items (rs > 0.83). Experiment 1 also suggested that voluntariness was an important factor in attitudes toward euthanasia suggesting that attitudes toward euthanasia may form coherent clusters that center on the voluntariness of the treatment. But what could predict these attitudes across different descriptions? Experiment 2 was designed to help answer this question.

In order to predict attitudes toward euthanasia, the Berlin Euthanasia Scale-6 (BE-6) was used. The BE-6 is a 6-item instrument that measures people's general attitudes about the moral permissibility of euthanasia (Feltz and Cokely, submitted). Evidence from this scale suggests that people do not measurably distinguish active and passive euthanasia, but people do distinguish among three different kinds of voluntariness: Voluntary (i.e., the treatment is requested), non-voluntary (i.e., the person is unable to request treatment due to, for example, a coma), and involuntary (i.e., the person requests the treatment not be performed). The BE-6 uses two items to measure these three different types of euthanasia. In addition, the Moral Foundations Questionnaire (MFQ) was used (Graham et al. 2011). The MFQ measures five different foundations for people's moral judgments: Harm/ care, fairness/reciprocity, in-group/loyalty, authority/respect, and purity/sanctity. The elements of the MFQ have been argued to be major components in people's general moral views. It was predicted that the BE-6 would be the major predictor of judgments about euthanasia even when considering other demographic variables and the MFO.

13.4.1 Participants

Four hundred and nine participants were recruited from Amazon's Mechanical Turk. Twenty-two participants were excluded for not completing the survey. Two people were excluded for reporting an age less than 18. The mean age was 37.23, SD = 13.48, Range 18-74. Sixty-seven percent (N = 260) were female.

 Table 13.3 Correlations for scales Experiment 1

		1											
	1	2	3	4	5	9	7	8	9	10	11	12	13
1. Euthansia	1												
2. PAS	**98	1											
3. Aid	.83**	*88.0	1										
4. BNT	0.05	0.12*	80.0	1									
5. Extraversion	-0.05	-0.05	-0.07	-0.03	1								
6. Agreeableness	90.0	-0.08	-0.04	-0.04	0.07	1							
7. Conscientiousness	-0.03	-0.04	-0.01	0.01	0.08	0.29**	1						
8. Emotional	-0.04	-0.04	-0.05	0.04	0.21**	0.43**	0.43**	1					
9. Openness	90.0	0.07	0.09	-0.04	0.23**	0.23**	0.15**	0.18**	1				
10. Age	-0.03	0.01	90.0	0.03	0.01	0.19**	0.2**	0.24**	-0.03				
11. Gender	-0.01	-0.02	0.02	-0.09	0.04	80.0	0.05	-0.22**	0.04	0.03	1		
12. Politics	-0.28**	-0.3**	-0.33**	-0.09	60.0	-0.05	0.1	0.12*	-0.11*	0.1*	-0.03	1	
13. Area	-0.04	-0.02	-0.02	-0.05	0	-0.02	0.01	0.01	-0.03	0.05	0.11*	0.1*	_

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13.4.2 Materials

Participants received the same three scales from Experiment 1, counterbalanced for order. Participants then randomly received only one of the six scenarios from Experiment 1. Next, participants completed the BE-6, MFQ, the TIPI, and the BNT. Finally, basic demographic information was gathered.

13.4.3 Results

13.4.3.1 Scenarios

Analyses proceeded in the same fashion as Experiment 1. Responses to the scenarios were analyzed first. Means and standard deviations are reported in Table 13.4. An ANOVA with the different scenarios as the independent variable and responses to the permissibility question as the dependent variable showed an overall difference between scenarios F (5, 380) = 29.85, p < 0.001, η_p^2 = 0.28. An ANOVA with voluntariness as the independent variable and responses to the permissibility question as the dependent variable revealed an overall difference between non-voluntary (M = 2.45, SD = 1.7) and voluntary (M = 4.51, SD = 1.69) conditions, F (1, 384) = 142.34, p < 0.001, η_p^2 = 0.27.

Pairwise comparisons were next performed to determine differences in permissibility judgments as a function of voluntariness. ANOVAs revealed large differences for each description as a function of voluntariness: Euthanasia, F(1, 136) = 49.57, p < 0.001, $\eta_p^2 = 0.27$, physician assisted suicide F(1, 111) = 66.23, p < 0.001, $\eta_p^2 = 0.37$, aid in dying F(1, 133) = 35.01, p < 0.001 $\eta_p^2 = 0.21$.

ANOVAs tested differences in judgments of permissibility as a function of the description. A statistically significant difference was found between non-voluntary euthanasia and non-voluntary physician assisted suicide F(1, 110) = 4.46, p = 0.04, $\eta_p^2 = 0.04$, and non-voluntary physician assisted suicide and non-voluntary aid in dying F(1, 109) = 4.71, p = 0.03, $\eta_p^2 = 0.04$, but not between non-voluntary euthanasia and non-voluntary aid in dying (F < 1). Next, voluntary end of life decisions were analyzed using each description as the independent variable and response to the permissibility question as the dependent variable. There were no reliable differences between the different types of voluntary end of life decisions (Fs < 1).

Table 13.4 Means and Standard Deviations for Scenarios in Experiment 2

	Non-voluntary	Voluntary
Euthanasia	N = 65, M = 2.62, SD = 1.77	N = 73, M = 4.64, SD = 1.62
PAS	N = 47, M = 2.0, SD = 1.43	N = 66, M = 4.47, SD = 1.75
Aid in dying	N = 64, M = 2.64, SD = 1.79	N = 71, M = 4.42, SD = 1.71

13.4.3.2 Scales

The scales had excellent internal reliabilities and the mean responses were similar for each scale: Euthanasia Scale (M=3.62, SD=0.75, $\alpha=0.92$), physician assisted suicide scale (M=3.65, SD=0.79, $\alpha=0.92$), and aid in dying scale (M=3.74, SD=0.74, $\alpha=0.92$). A mixed-model ANOVA with responses to the three scales as within subjects factors and order of presentation as the between subjects factor revealed an overall significant difference F(2, 382) = 8.16, p=0.001, $\eta_p^2=0.04$. However, this effect was qualified by a trend for an interaction of order F(2, 383) = 2.51, p=0.08, $\eta_p^2=0.01$. To control for the order effect, first responses were analyzed. An ANOVA found an overall difference between the three scales, F(1, 383) = 4.59, p=0.01, $\eta_p^2=0.02$. Pairwise comparisons found a small but reliable difference between euthanasia (M=3.28, SD=0.63) and physician assisted suicide (M=3.46, SD=0.63), F(1, 257)=4.89, P=0.03, $\eta_p^2=0.02$, and aid in dying (M=3.5, SD=0.58) F(1, 257)=8.46, P=0.004, $\eta_p^2=0.03$, but not between aid in dying and physician assisted suicide (F<1).

13.4.3.3 Predicting Responses

A separate goal of Experiment 2 was to determine what predicted judgments about the 6 scenarios and 3 scales. Stepwise linear regressions were employed. Stepwise regressions proceed by finding the single best predictor. Then, the next step is to find the two best predictors. Then the next step is to find the 3....n predictors until some pre-specified level of significant is not met by subsequent predictors. In these series of stepwise regressions, predictors that were significant at the p = 0.05 level were retained in the models. The predictor variables for all analyses involving responses to the 3 scales and 6 scenarios were the BE-6 (Voluntary M = 4.25, SD = 1.67, Non-voluntary M = 3.43, SD = 1.68, Involuntary M = 1.95, SD = 1.27), BNT, MFQ, political orientation, sex, age, and personality. See Table 13.5 for the stepwise regressions for the scenarios and Table 13.6 for the stepwise regressions for the scales. As predicted, the items for the BE-6 were the strongest predictors for the responses to both scenarios and scales. There were no other variables that consistently predicted in these models.

13.5 Discussion

Overall, the results from these two experiments suggested that there is some influence of descriptions on the judgments of permissibility for euthanasia. In Experiment 1, there was an overall modest effect of description in the scenarios for some voluntary, but not non-voluntary, end of life decisions. As predicted, physician assisted suicide was the least preferable option and aid in dying was the most preferable option. This modest effect was reproduced with the scales in

 Table 13.5
 Stepwise regressions for scenarios in Experiment 2

	Model	Variable	Adjusted R ²	df	F	d	R_{change}^2	Fchange	p Fchange
Euthanasia	1	BE voluntary	0.41	1385	267.6	<0.001	0.41	267.6	<0.001
	2	BE	0.42	2384	141.33	<0.001	0.01	9.29	0.002
		non-voluntary							
	3	Loyalty	0.43	3383	98.56	<0.001	0.01	7.93	0.005
PAS	1	BE voluntary	0.48	1385	356.69	<0.001	0.48	356.69	<0.001
	2	Gender	0.49	2384	184.52	<0.001	0.01	6.9	0.009
	3	BE Non-	0.49	3383	125.89	<0.001	0.01	4.89	0.03
		voluntary							
	4	Fairness	0.5	4382	96.43	<0.001	0.01	4.55	0.03
Aid		BE Voluntary	0.45	1385	310.52	<0.001	0.45	310.52	<0.001
	2	BE Non-	0.46	2384	167.82	<0.001	0.02	14.35	<0.001
		voluntary							
	3	Gender	0.47	3383	115.2	<0.001	0.01	5.78	0.02

 Table 13.6
 Stepwise Regressions for Scales in Experiment 2

	Model	Variable	Adjusted R ²	df	F	P	R_{change}^2	Fchange	p Fchange
Euthanasia		BE non-voluntary	0.07	163	6.05	0.02	0.09	6.05	0.02
Non-voluntary	2	Emotional stability	0.16	162	7.06	0.002	0.1	7.45	0.01
	3	Gender	0.2	161	6.37	0.001	0.05	4.25	0.04
Euthansia voluntary		BE voluntary	0.65	171	131.99	<0.001	0.65	131.99	<0.001
PAS non-voluntary		BE involuntary	0.24	146	15.7	<0.001	0.25	15.7	<0.001
PAS voluntary		BE voluntary	8.0	164	260.39	<0.001	8.0	260.39	<0.001
Aid non-voluntary		BE voluntary	0.14	162	11.59	0.001	0.16	11.59	0.001
Aid voluntary		BE voluntary	0.46	169	61.08	<0.001	0.47	61.08	<0.001
	2	BE non-voluntary	0.54	268	41.83	<0.001	80.0	12.55	0.001
	3	Emotional stability	0.56	367	30.73	<0.001	0.03	4.28	0.04
	4	Age	0.58	466	25.26	<0.001	0.03	4.31	0.04

Experiment 1. Again aid in dying was more permissible than physician assisted suicide. Experiment 2 found a modest effect for voluntary end of life decisions in the scenarios. Aid in dying was preferred to physician assisted suicide. For the scales, aid in dying was preferred to euthanasia. However, no measurable differences were found between aid in dying and physician assisted suicide. In sum, the different descriptions of euthanasia used in the current series of experiments had modest and intermittent effects on judgments of moral permissibility.

These results suggest that if there is a stable, reliable effect of different descriptions of euthanasia, this effect is small. To illustrate, one of the largest differences occurred in Experiment 2 between scenarios involving non-voluntary physician assisted suicide and non-voluntary aid in dying. Differences in descriptions accounted for about 4 % of the total variance in judgments ($d \approx 0.4$). This is typically thought to be a small to medium effect size. To put the effect into perspective, only about 66 % of responses to aid in dying were more favorable than the mean response to the physician assisted suicide scenario. In other words, 86 % of the distributions of responses between the groups overlap. To illustrate in one final way, a person would have a 61 % chance of being able to identify correctly which scenario the participant was responding to given the participant's answer. Most of the other effects in the current series of studies were smaller. Hence, while the description of the end of life treatment may be a factor in some people's judgments of the moral permissibility of euthanasia, these descriptions are not very important factors for most people.

Even if the effect of description was modest, the current series of studies provide some relevant empirical evidence for some contemporary debates surrounding euthanasia. For one, they add to the evidence that some demographic variables are associated with some judgments about euthanasia. A number of demographic factors have been found to predict judgments about euthanasia including age (DeCesare 2000; Domino 2002; Ho and Penney 1992; Huber et al. 1992; Jorgenson and Neubecker 1981; Ostheimer 1980; Sawyer and Sobal 1987; Singh 1979), sex (Domino 2002; Emanuel 2002; Jorgenson and Neubecker 1981; Sawyer and Sobal 1987; Singh 1979), political orientation (Domino 2002; Emanuel 2002; Hains and Hulbert-Williams 2013; Jorgenson and Neubecker 1981; Sawyer and Sobal 1987; Singh 1979), and religious affiliation (Domino 2002; Emanuel 2002; Genuis et al. 1994b; Hains and Hulbert-Williams 2013; Jorgenson and Neubecker 1981; Kemmelmeier et al. 1999; Meier et al. 1998; Ostheimer 1980; Singh 1979; Wasserman et al. 2005). However, these associations are not always consistently found and sometimes some of the associations go in the opposite direction (e.g., Chong and Fok (2013) found a positive relation with age and acceptance of euthanasia contrary to other evidence suggesting a negative relation). Results from Experiment 1 supported some of these relations. While there were very few systematic associations with demographic variables for the six scenarios, there was a strong and consistent relation between political orientation and judgments concerning the scaled items.

Judgments about the moral permissibility of euthanasia appear to be largely stable, yet varied. There were strong and persistent differences between voluntary and non-voluntary euthanasia independent of the descriptions of euthanasia (Ho 1998). Moreover, the BE-6 was the best predictor of the permissibility judgments for these end of life decisions (Feltz and Cokely, submitted). The BE-6 predicted better than any demographic variables and predicted better than domain general components of moral judgments measured by the MFO. The lack of a substantive effect of descriptions along with the strong predictive ability of the BE-6 suggests that judgments about euthanasia are relatively stable and center on the voluntariness of the procedure—even if those descriptions refer to conceptually distinct types of euthanasia. In many instances, the BE scale was the only predictor of judgments about the moral permissibility of the end of life treatment. When there were multiple predictors, the BE-6 scale was the major predictor of those judgments accounting for the most variance. For example, the relation of BE-6's voluntary subscale accounted for 41 % of the overall variance in judgments about the permissibility of the voluntary euthanasia scenario in Experiment 2. Additional factors only accounted for about 1 % of the variance. The influence of different descriptions of the end of life decision was small at around 3 % of the total variance. These findings suggest that judgments about the permissibility of many end of life decisions form a coherent cluster that is relatively uninfluenced by framing. Judgments are much more influenced by the voluntariness of the procedure (about 12 times stronger). This coherent clustering could explain the relatively small influence of framing on permissibility judgments. As long as the procedure is voluntary (or non-voluntary or involuntary), it is relatively less important what kind of treatment it is.

Not only do these data suggest that description is not likely to be an important factor in some people's permissibility judgments, they also undercut some central premises in some arguments against the permissibility of voluntary active euthanasia. As mentioned, one prominent argument against allowing voluntary active euthanasia is the *slippery slope* argument. Take the logical slippery slope argument first. It appears that, on average, most people accept many forms of voluntary euthanasia. However, people are much less likely to judge as permissible non-voluntary (much less involuntary) types of euthanasia. This suggests that for many people, they have no problem making important moral and conceptual distinctions between different kinds of euthanasia. As such, it appears that they feel no conceptual or logical pressure to accept other kinds of euthanasia given that they accept voluntary euthanasia. Of course, it could be that people are inattentive or simply making a mistake. But to substantiate either of those two possibilities requires an argument that can account for the current body of evidence.

The empirical version of the slippery slope argument could still be sound. Is it true that, as a matter of fact, if we allow voluntary active euthanasia, then that would cause a reduction in the judgments of impermissibility of less desirable forms of euthanasia (e.g., active involuntary euthanasia)? Some empirical data has already been used to help address the strength of the empirical slippery slope argument. Acceptance of active voluntary euthanasia does not necessarily lead to acceptance of any less desirable forms of euthanasia (primarily involuntary active euthanasia) (Lewis 2007). The data reported in this chapter support this claim. Overall, the mean responses to the BE-6 scale indicated that people agree that

voluntary and non-voluntary types of euthanasia are permissible whereas involuntary types of euthanasia are not. The correlation between Voluntary and Involuntary subscales of the BE-6 was very modest (r (386) = 0.15, p = 0.002, or about 2 % of the total variance). However, the difference was very large (repeated measures ANOVA F (1, 385) = 542.92, p < 0.001, η_p^2 = 0.59, or about 35 % of the total variance). As such, there is little reason to think that one who accepts voluntary active euthanasia will be led to accept involuntary active euthanasia. In fact, overall there are robust differences between Voluntary and Involuntary subscales. Hence, there is some good reason to think that there are already people who accept voluntary euthanasia but do not accept involuntary euthanasia, contrary to what would be predicted by the empirical slippery slope argument.

In summary, different descriptions of euthanasia appear to have minimal impact on people's judgments of the moral permissibility of euthanasia. Other factors like the voluntariness of the decision are more important. In addition, the BE-6 was the best predictor of a host of attitudes about end of life decisions. These data suggest that the BE-6 quickly assesses a cluster of related attitudes about euthanasia. This instrument thereby has the potential to be used to help ensure that patients' autonomy is respected by following their treatment preferences. Rather than assessing any number of possible framings (e.g., aid in dying, euthanasia, physician assisted suicide), the BE-6 likely does a very good job of predicting these (and other) decisions about ending life.

Appendix

Scenarios

Instructions: The following scenario is meant to explore some of your feelings toward end of life decision making. It is not meant to test what you know.

Euthanasia/Physician Assisted Suicide/Aid in Dying Not Voluntary

Mr. Smith has a serious illness that is totally incurable given current knowledge. He is currently receiving the best possible treatment. He suffers atrociously and pain medication cannot relieve his suffering. He has never expressed a wish for (euthanasia/physician assisted suicide/aid in dying).

(Euthanasia/Physician assisted suicide/Aid in dying) is morally permissible in this case.

Euthanasia/Physician Assisted Suicide/Aid in Dying Voluntary

Mr. Smith has a serious illness that is totally incurable given current knowledge. He is currently receiving the best possible treatment. He suffers atrociously and pain medication cannot relieve his suffering. He has clearly and repeatedly requested (euthanasia/physician assisted suicide/aid in dying).

(Euthanasia/Physician assisted suicide/Aid in dying) is morally permissible in this case requested aid in dying.

(Euthanasia/Physician assisted suicide/Aid in dying) is morally permissible in this case.

Scales

Instructions: The following scale is meant to explore some of your feelings toward end of life decision making. It is not meant to test what you know. (* *indicates item to be reverse scored.*)

- (Euthanasia/Physician assisted suicide/Aid in dying) is acceptable if the person is old.
- 2. (Euthanasia/Physician assisted suicide/Aid in dying) should be accepted in today's society.
- 3. There are never cases when (euthanasia/physician assisted suicide/aid in dying) is appropriate.*
- 4. (Euthanasia/Physician assisted suicide/Aid in dying) is helpful at the right time and place (under the right circumstances).
- 5. (Euthanasia/Physician assisted suicide/Aid in dying) is a humane act.
- (Euthanasia/Physician assisted suicide/Aid in dying) should be against the law.*
- 7. There are very few cases when (euthanasia/physician assisted suicide/aid in dying) is acceptable.*
- 8. (Euthanasia/Physician assisted suicide/Aid in dying) should only be used when the person has a terminal illness.
- 9. (Euthanasia/Physician assisted suicide/Aid in dying) is acceptable in cases when all hope of recovery is gone.
- 10. (Euthanasia/Physician assisted suicide/Aid in dying) gives a person a chance to die with dignity.
- 11. (Euthanasia/Physician assisted suicide/Aid in dying) should be practiced only to eliminate physical pain and not emotional pain

References

Achille, Marie A., and James R.P. Ogloff. 1997. When is a request for assisted suicide legitimate? Factors influencing public attitudes toward euthanasia. *Canadian Journal of Behavioral Science* 29: 19–27.

American Medical Association (AMA), Council on Ethical and Judicial Affairs. 1992. Decisions near the end of life. *JAMA* 267: 2229–2233.

Barry, Vincent E. 2007. *Philosophical thinking about death and dying*. Belmont, CA: Thomson/Wadsworth.

Battin, Margaret Pabst. 2005. Ending life: Ethics and the way we die. Oxford: Oxford University Press.

Beauchamp, Tom L. 2006. The right to die as the triumph of autonomy. *Journal of Medicine and Philosophy* 3: 643–654.

Brock, Dan W. 1992. Voluntary active euthanasia. Hastings Center Report 22: 10-22.

Buhrmester, Michael, Tracy Kwang, and Samuel D. Gosling. 2011. Amazon's Mechanical Turk: A new source of inexpensive, yet high-quality, data? *Perspectives on Psychological Science* 6: 3–5.

Chong, Alice Ming Lin, and Shiu-Yeu Fok. 2013. Validation of the Chinese expanded euthanasia attitude scale. *Death Studies* 37: 89–98.

Cokely, Edward T., Mirta Galesic, Eric Schulz, Saima Ghazal, and Rocio Garcia-Retamero. 2012. Measuring risk literacy: The Berlin Numeracy Test. *Judgment and Decision Making* 7: 25–47.

- DeCesare, Michael A. 2000. Public attitudes toward euthanasia and suicide for terminally ill persons: 1977 and 1996. *Social Biology* 47: 264–276.
- Domino, George. 2002. Community attitudes toward physician assisted suicide. *Omega* (Westport) 46: 199–214.
- Emanuel, Ezekiel J. 2002. Euthanasia and physician-assisted suicide: A review of the empirical data from the United States. *Archives of Internal Medicine* 162: 142–152.
- Feltz, Adam and Edward T. Cokely. submitted. The Berlin euthanasia scale.

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- Frileux, S., C. Lelievre, M.T.M. Sastre, E. Mullet, C. Paul, and Sorum. 2003. When is physician assisted suicide or euthanasia acceptable? *Journal of Medical Ethics* 29: 330–336.
- Gamliel, Eyal. 2013. To end life or not to prolong life: The effect of message framing on attitudes toward euthanasia. *Journal of Health Psychology* 18: 693–703.
- Genuis, Stephen J., Shelagh K. Genuis, and Wei-Ching Chang. 1994. Public attitudes toward the right-to-die. *Canadian Medical Association Journal* 150: 701–708.
- Gosling, Samuel D., Peter J. Rentfrow, and William B. Swann. 2003. A very brief measure of the big-five personality domains. *Journal of Research in Personality* 37: 504–528.
- Graham, Jesse, Brian A. Nosek, Jonathan Haidt, Ravi Iyer, Spassena Koleva, and Peter H. Ditto. 2011. Mapping the moral domain. *Journal of Personality and Social Psychology* 101: 366–385.
- Hains, Carrie A.M., and Nicholas J. Hulbert-Williams. 2013. Attitudes toward euthanasia and physician-assisted suicide: A study of the multivariate effects of healthcare training, patient characteristics, religion and locus of control. *Journal of Medical Ethics* 39: 713–716.
- Ho, Robert. 1998. Assessing attitudes toward euthanasia: An analysis of the subcategorical approach to right to die issues. *Personality and Individual Differences* 25: 719–734.
- Ho, Robert, and Ronald K. Penney. 1992. Euthanasia and abortion: Personality correlates for the decision to terminate life. *Journal of Social Psychology* 132: 77–86.
- Huber, Ruth, V.M. Cox, and W.B. Edelen. 1992. Right-to-die responses from a random sample of 200. *The Hospice Journal* 8: 1–19.
- Jackson, Emily, and John Keown. 2012. Debating euthanasia. Portland: Hart.
- Jorgenson, David E., and Ron C. Neubecker. 1981. Euthanasia—A national survey of attitudes toward voluntary termination of life. *Omega-Journal of Death and Dying* 11: 281–291.
- Kemmelmeier, Markus, Eugene Burnstein, and Kaiping Peng. 1999. Individualism and authoritarianism shape attitudes toward physician-assisted suicide. *Journal of Applied Social Psychology* 29: 2613–2631.
- Kroh, Martin. 2007. Measuring left-right political orientation: The choice of response format. *Public Opinion Quarterly* 71: 204–220.
- Levin, Irwin P., Sandra L. Schneider, and Gary J. Gaeth. 1998. All frames are not created equal: A typology and critical analysis of framing effects. *Organizational Behavior and Human Decision Processes* 76: 149–188.
- Lewis, Penney. 2007. The empirical slippery slope from voluntary to non-voluntary euthanasia. *Journal of Law Medicine and Ethics* 35: 197–210.
- MacDonald, William L. 1998. Situational factors and attitudes toward voluntary euthanasia. *Social Science and Medicine* 46: 73–81.
- McLachlan, Hugh V. 2010. Assisted suicide and the killing of people? Maybe. Physician-assisted suicide and the killing of patients? No: The rejection of Shaw's new perspective on euthanasia. *Journal of Medical Ethics* 36: 306–309.
- Meier, Diane E., Carol-Ann Emmons, Sylvan Wallenstein, R. Timothy Quill, Sean Morrison, and Christine K. Cassel. 1998. A national survey of physician-assisted suicide and euthanasia in the United States. *New England Journal of Medicine* 338: 1193–1201.
- Ostheimer, John M. 1980. The polls: Changing attitudes toward euthanasia. *Public Opinion Quarterly* 44: 123–128.
- Paollacci, Gabriele, Jesse Chandler, and Panagiotis G. Ipeirotis. 2010. Running experiements using Amazon Mechanical Turk. *Judgment and Decision Making* 5: 411–419.

- Parkinson, Lynne, Katherine Rainbird, Ian Kerridge, Gregory Carter, John Cavenagh, John McPhee, and Peter Ravenscroft. 2005. Cancer patients' attitudes toward euthanasia and physician-assisted suicide: The influence of question wording and patients' own definitions on responses. *Journal of Bioethical Inquiry* 2: 82–89.
- Raz, Joseph. 2013. Death in our life. Journal of Applied Philosophy 30: 1-11.
- Rogers, James R. 1996. Assessing right to die attitudes: A conceptually guided measurement model. *Journal of Social Issues* 52: 63–84.
- Sawyer, Darwin, and Jeffery Sobal. 1987. Public attitudes toward suicide—Demographic and ideological correlates. *Public Opinion Quarterly* 51: 92–101.
- Singh, B.Krishna. 1979. Correlates of attitudes toward euthanasia. Social Biology 26: 247-254.
- Tversky, Amos, and Daniel Kahneman. 1981. The framing of decisions and the psychology of choice. *Science* 211: 453–458.
- Velleman, David J. 1992. Against the right to die. *Journal of Medicine and Philosophy* 17: 665-681.
- Verbakel, Wilko F.A.R., Johan P. Cuijpers, Daan Hoffmans, Michael Bieker, Ben J. Slotman, and Suresh Senan. 2009. Volumetric intensity-modulated arc therapy vs. conventional IMRT in head-and-neck cancer: A comparative planning and dosimetric study. *International Journal of Radiation Oncology*Biology*Physics* 74: 252–259.
- Wasserman, Jason, Jeffrey M. Clair, and Ferris J. Ritchey. 2005. A scale to assess attitudes toward euthanasia. *Omega (Westport)* 51: 229–237.
- Wolfe, Joanne, Diane L. Fairclough, Brian R. Clarridge, Elisabeth R. Daniels, and Ezekiel J. Emanuel. 1999. Stability of attitudes regarding physician-assisted suicide and euthanasia among oncology patients, physicians, and the general public. *Journal of Clinical Oncology* 17: 1274.