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WASHINGTON UNIVERSITY IN ST. LOUIS

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Medical Aid in Dying: Knowledge, Attitudes, and Beliefs of Licensed Psychologists

by

Christine Caroline Merz

A dissertation presented to  
The Graduate School  
of Washington University in  
partial fulfillment of the  
requirements for the degree  
of Doctor of Philosophy

August 2019  
St. Louis, Missouri

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Christine Caroline Merz

*Washington University in St. Louis*

*August 2019*



Dedicated to my grandmother, Eleanor Merz, who passed away during my first semester of graduate school.

## ABSTRACT OF THE DISSERTATION

Medical Aid in Dying: Knowledge, Attitudes, and Beliefs of Licensed Psychologists

by

Christine Caroline Merz

Doctor of Philosophy in Psychological & Brain Sciences

Washington University in St. Louis, 2019

Professor Brian Carpenter, Chair

Medical aid in dying (MAID) is a process by which individuals with terminal illness can voluntarily ingest a lethal dose of medication provided to them by their physician to intentionally end their life. MAID is currently legal in eight U.S. states and several other countries. Licensed psychologists and other mental health professionals are implicated in MAID laws in the form of psychological evaluation that is required for select patients. Little is known about the knowledge and attitudes of psychologists regarding MAID, including views on legal and ethical acceptability, and professional competence to conduct psychological evaluations for patients requesting MAID. The current study investigated the knowledge, attitudes, and beliefs regarding MAID in a U.S. national sample of licensed psychologists ( $N = 248$ ). Factual knowledge of MAID laws was high, and attitudes toward MAID were overwhelmingly positive. The strongest predictors of support for MAID were lower religiosity and more left/liberal political orientation. Nearly half of the sample reported they would refuse to conduct a psychological evaluation of a patient requesting MAID, mainly due to doubts about their competency to conduct such an evaluation. Findings indicate the potential need for specialty training for psychologists working with patients who request assistance dying at the end of life.

# **Chapter 1: Introduction**

Medical aid in dying (MAID) refers to the practice by which a competent individual over the age of 18 with terminal illness, deemed to have less than six months to live, voluntarily ingests a lethal dose of medication provided to them by a physician with the intention of ending their life. MAID is currently legal in eight U.S. states (see Table 1), and consequently, the number of deaths involving MAID is on the rise (California Department of Public Health, 2017; Oregon Center for Health Statistics, 2017; Washington State Department of Health, 2017). Advocates say MAID laws relieve suffering and provide autonomy and control for people with terminal illness. Critics say the practice goes against physicians' Hippocratic Oath to "do no harm" and also cite religious objections to ending life prematurely. As 23 more states consider legislation to legalize MAID this legislative session, the question of whether people with terminal illness should have the right to end their own lives remains politically controversial, legally and clinically complicated, and the topic of much ethical debate in the U.S.

Many terms have been used to describe a range of activities designed to hasten death (see Table 2). MAID has been referred to as physician-assisted suicide (PAS), aid in dying, and physician-assisted death, though all terms represent the same fundamental practice. In this paper, when describing previous studies, the specific terms used by previous researchers are used because there are important differences among these constructs and because the language that is used does influence attitudinal outcomes. For example, specific attention is drawn to the differences between MAID and euthanasia, in which a physician administers a lethal dose of medication to end a patient's life (contrasted with *self* administration by the patient required by

Table 1

*U.S. States and Territories with Legal Medical Aid in Dying*

State or Territory	Legislation Passed	Went into Effect	Method of Legalization	Name of Statute
Oregon	November 8, 1994	October 27, 1997	Legislation	Ballot Measure 16: Oregon Death with Dignity Act
Washington	November 4, 2008	March 5, 2009	Legislation	Initiative 1000: Washington Death with Dignity Act
Montana	December 31, 2009	December 31, 2009	State Supreme Court Ruling	Baxter v. Montana (Rights of the Terminally Ill Act)
Vermont	May 20, 2013	May 20, 2013	Legislation	Act 39: Patient Choice and Control at End of Life Act
California	September 11, 2015	June 9, 2016	Legislation	Senate Bill 128: End of Life Option Act
Colorado	November 8, 2016	December 16, 2016	Legislation	Proposition 106: End of Life Options Act
District of Columbia	December 19, 2016	June 6, 2017	Legislation	Law 21-182: District of Columbia Death with Dignity Act
Hawaii	March 29, 2018	January 1, 2019	Legislation	House Bill 2739: Our Care, Our Choice Act

*Note.* Information current as of January 2019.

Table 2

*Definition of Terms for Hastening Death*

Term	Definition
Medical aid in dying (also referred to as Physician assisted suicide)	A physician intentionally helps a person to terminate his or her life by providing drugs for self-administration, at that person's voluntary and competent request.
Active euthanasia	A physician or other person intentionally ends the life of a person by the administration of drugs, at that person's voluntary and competent request.
Passive euthanasia	Terminating potentially life-sustaining treatments, with the patient or a proxy's agreement.
Nontreatment	Withholding or withdrawing medical treatment from a person either because of medical futility or at that person's voluntary and competent request.
Palliative sedation (also referred to as Terminal sedation)	The monitored use of medications intended to induce a state of decreased or absent awareness (unconsciousness) to relieve the burden of otherwise intractable suffering in a manner that is ethically acceptable to the patient, family, and healthcare providers.
Voluntary stopping of eating and drinking	A patient intentionally refuses to eat, drink, or take medication with the intention of ending his or her life sooner.

MAID). Euthanasia is currently legal in five countries (Belgium, the Netherlands, Luxembourg, Colombia, and Canada) but is illegal in all 50 U.S. states.

## **1.1 Attitudes Toward Medical Aid in Dying**

Attitudes toward MAID vary widely and have been studied among the general public, individuals with terminal illness and their family members, and professionals involved in the practice, such as physicians and mental health professionals. Variability in attitudes is associated with several factors, including inconsistency in the terminology used to describe MAID; individuals' religious and political views; demographic characteristics of respondents, such as age, race/ethnicity, and gender; and moment in history when attitudes are surveyed.

Understanding attitudes toward MAID is important because those beliefs likely drive related behaviors. For the general public, attitudes may influence whether to vote in favor of a state MAID ballot measure; for patients, whether they would want to utilize MAID for themselves; and for physicians and mental health professionals, whether they would be willing to be involved in the care of people who request MAID.

Although public support for MAID fluctuates somewhat depending on how survey questions are worded, most recent national polls show that a majority of Americans support physician-assisted suicide. Since 1996, Gallup has asked this question in several national surveys: "When a person has a disease that cannot be cured and is living in severe pain, do you think doctors should or should not be allowed by law to assist the patient to commit suicide if the patient requests it?" The most recent data collected from a nationally representative sample of 493 individuals in 2017 showed 67% in favor of this practice, up from 52% in 1996 (Gallup News Service, 2017). Since 1947, Gallup has also included the following question on euthanasia: "When a person has a disease than cannot be cured, do you think doctors should be allowed by

law to end the patient's life by some painless means if the patient and his or her family request it?" The percentage of individuals responding in favor increased steadily from 37% in 1947 to 75% in 1996 and has fluctuated around 65% – 75% in favor since then (Gallup News Service, 2017). The most recent data collected from a nationally representative sample of 518 individuals in 2017 showed 73% in favor of euthanasia. Within these two questions, note in the first the mention of pain, the use of the word "suicide," and the implication that the patient takes the ultimate action to end life, whereas in the second, different words and phrases are used and the question implies that the *doctor* takes the action. When both questions are used in the same survey, support for euthanasia is, on average, 10 percentage points above support for doctor-assisted suicide (range = 2% – 19% from 1996 until 2017). See Table 3 for an overview of the precise wording used by national polling organizations and the most recent corresponding levels of public support.

Emanuel, Onwuteaka-Philipsen, Urwin, & Cohen (2016) point to two aspects of the Gallup survey data that are surprising. First, there has been a lag between increasing support of both euthanasia and PAS and the legalization of PAS (i.e., MAID) in the U.S. In other words, a majority of the country has supported euthanasia since 1973, and a majority has supported PAS since the question was first introduced by Gallup in 1996, yet MAID did not become legal in select U.S. states until the 2000's (with the exception of Oregon in 1997), as ballot measures before then were consistently voted down by state electorates. In an analysis of public opinion polls conducted from 1936 to 2002, Allen et al. (2006) summarize the consistent growing support for both euthanasia and PAS and note that public opinions on life and death decisions were more closely aligned with official policy over 50 years ago; in contrast, existing policies have not caught up with America's growing support for these practices. Second, there is

Table 3

*National Survey Data on Public Support for Euthanasia and Assisted Suicide (Medical Aid in Dying)*

Year	Source	N	Verbatim Questions	% in Support
2011	BBC World News/Harris Interactive	2,340	Do you think that the law should allow doctors to comply with the wishes of a dying patient in severe distress who asks to have his life ended, or not?	58%
			Do you think that doctors should be allowed to advise terminally ill patients who request the information on alternatives to medical treatment and/or ways to end their own lives?	67%
			How much do you agree with the following statement? "Individuals who are terminally ill, in great pain, and who have no chance for recovery have the right to choose to end their own life."	70%
2013b	Pew Research Center	1,994	Is there a moral right to suicide when a person is an extremely heavy burden on his or her family?	32%
			Is there a moral right to suicide when a person is ready to die because living has become a burden?	38%
			Do you approve or disapprove of laws to allow doctor-assisted suicide for terminally ill patients?	47%
			Is there a moral right to suicide when a person has an incurable disease?	56%
			Is there a moral right to suicide when a person is suffering great pain with no hope of improvement?	62%
2014	Rasmussen Reports	1,000	Three US states now allow voluntary euthanasia or assisted suicide for those who are terminally ill. Do you favor or oppose the practice of voluntary euthanasia?	50%
2015	General Social Survey	1,664	When a person has a disease that cannot be cured, do you think doctors should be allowed by law to end the patient's life by some painless means if the patient and his family request it?	67%
2017	Gallup	1,011	When a person has a disease that cannot be cured and is living in severe pain, do you think doctors should or should not be allowed by law to assist the patient to commit suicide if the patient requests it?	67%
			When a person has a disease that cannot be cured, do you think doctors should be allowed by law to end the patient's life by some painless means if the patient and his or her family request it?	73%



consistently higher support for euthanasia – arguably the more radical procedure because it involves a healthcare professional actively administering a medication that ends a person’s life – than PAS, yet euthanasia remains illegal in all 50 states. Some have speculated that the softer description of euthanasia, in which doctors “end the patient’s life by painless means,” is likely the reason it earns larger support than PAS. Use of the word “suicide,” meanwhile, introduces an emotionally charged term into an already sensitive subject (Dugan, 2015). It is important to note that if the patient ending his or her own life is considered suicide, then a physician ending the patient’s life, using parallel terminology, would be considered homicide, yet no survey found to date uses this term. The next section discusses research that has explored individual characteristics associated with support or opposition to MAID.

## **1.2 Factors Associated with Attitudes Toward MAID**

### **1.2.1 Religiosity**

Religiosity has several different components, including participation in organized religious activities (e.g., church attendance) and/or private spiritual practices (e.g., prayer). Most research has found a negative association between indices of religiosity and support for active steps to hasten death. For example, support for euthanasia is consistently lowest among individuals who attend church weekly when compared to individuals who attend church monthly, and the highest level of support for euthanasia is among individuals who attend church less often than once a month or not at all – a finding that has been consistent for over 10 years (McCarthy, 2014). Similarly, the most recent data published by Gallup found that weekly church goers had the lowest level of support for euthanasia (55%) compared to monthly church goers (66%) and individuals who attend church seldom or never (87%; Wood & McCarthy, 2017). This negative association between religiosity (or at least church attendance) and support for

euthanasia may reflect beliefs that life-or-death decisions are solely the province of the divine (O'Rourke, 1991). Indeed, a vignette-based study of over 700 individuals on attitudes toward euthanasia and PAS found that religious respondents (as defined by higher scores on self-rated *importance of religion* and *strength of religious beliefs* items) were significantly more likely to find euthanasia and PAS unacceptable (Emanuel, Fairclough, Daniels, & Clarridge, 1996). Furthermore, Roman Catholic respondents were the most likely to find PAS unacceptable when compared to Protestant and Jewish respondents. These findings held true among study subsamples of cancer patients, oncologists, and members of the general public, and likely reflect the Catholic church's official position statement of strong opposition to PAS and euthanasia (U.S. Conference of Catholic Bishops, 2012).

The link between greater religiosity and opposition to any type of intentional ending of life appears to be consistent across groups. In a study of terminally ill patients near the end of life and their caregivers, 70% of individuals who rated themselves "somewhat or not religious" supported euthanasia compared to 47% of individuals who described themselves as "very religious" (Emanuel, Fairclough, & Emanuel, 2000). Among older adults, individuals who opposed PAS scored significantly higher on a 9-item measure of religiosity than individuals who supported PAS (Espino et al., 2010). A study of more than 3,800 Koreans found that individuals who endorsed "no religion" (approximately 33% of the sample) were significantly more likely to support both euthanasia and PAS than individuals who endorsed having a religion (Christians and Buddhists in this sample; Yun, Cho, Lee, Heo, & Choi, 2011). A report issued by the Pew Research Center (2013a) found that 10 of 16 major American religious groups queried officially oppose PAS and euthanasia, most often based on the belief that life is sacred and its end can only be decided by God. Other groups have no specific teachings or do not take an official position

with regard to these practices but express more general religious guidelines that imply opposition, such as the Buddhist teaching that it is morally wrong to destroy human life, or the Hindu concern that prematurely ending life could have a negative impact on one's Karma. Only two religious groups (United Church of Christ and Unitarian Universalist Association) support "the right to self-determination" in dying, even if that means hastening death (Pew Research Center, 2013a). Overall, religious convictions appear to be one of the strongest predictors of attitudes toward steps to end life.

### **1.2.2 Age**

Studies on attitudes toward MAID (typically phrased as "physician-assisted suicide") and euthanasia find varying associations between age and support for these practices. The percentage of adults aged 18 to 34 who supported Gallups's doctor-assisted suicide item increased substantially from 62% in 2014 to 81% in 2015. As a result, in 2015, younger adults became significantly more likely than middle aged and older adults to support PAS (65% and 61% support, respectively; Dugan, 2015). Among a clinical sample, Emanuel et al. (2000) found that for patients diagnosed with a terminal illness and estimated to have less than six months to live, individuals aged 65 years and older were significantly less likely to have personally considered asking for euthanasia or PAS than those younger than 65. Another study found that among 155 oncology patients, those over 50 years old (compared to patients 50 years old and younger) were significantly more likely to find euthanasia and PAS unacceptable for others, and significantly *less* likely to have considered requesting euthanasia or PAS for themselves (Emanuel et al., 1996). Yun et al. (2011) found just the opposite among Korean cancer patients, caregivers, oncologists, and members of the general public: individuals age 50 years and older were more likely to approve of PAS and euthanasia than individuals under age 50. Espino et al. (2010)

found no age differences in attitudes toward PAS within a sample of 208 older Texans age 60 to 89 years. Finally, among psychologists specifically, opposition to PAS was significantly predicted in one study by younger age (among other variables), though the sample only ranged in age from 31 to 76 years (Fenn & Ganzini, 1999). These mixed findings may reflect samples that are, within studies, narrow and homogeneous; samples that are small in size, with inadequate statistical power to detect age differences (if they exist); and inconsistency in how questions are worded (e.g. “suicide” vs. “end the patient’s life”). Period effects, cohort effects, and developmental influences may also be at play, so the exact nature of the association between age and attitudes toward these practices remains unclear.

### **1.2.3 Race/ethnicity**

In studies of race/ethnicity, non-White individuals tend to report less favorable views of euthanasia and PAS when compared to White individuals. In a study of 893 patient-caregiver dyads where the patient had a terminal illness (e.g., advanced heart disease, chronic obstructive pulmonary disease, cancer), a significantly smaller percentage of African American/Black patients (38%) than Caucasian/White, Hispanic, and “other” patients (64%) answered affirmatively to the question, “When a person has a disease that cannot be cured, do you think doctors should be allowed by law to end the patient’s life by some painless means if a patient and his family request it?” (Emanuel et al., 2000). When their caregivers were presented with a vignette describing a hypothetical patient with just a few months to live who is concerned about being a “burden,” a smaller percentage of African American/Black caregivers (12%) supported the administration of a life-ending injection from a physician than Caucasian/White, Hispanic, and “other” caregivers (31%). Interestingly, there was no significant difference between groups when the vignette patient was requesting euthanasia due to “excruciating pain” (59% support,

collapsed across all racial/ethnic groups). One limitation of this study is that all races other than African American/Black were placed into one category, obscuring other potential group differences.

Lichtenstein, Alcer, Corning, Bachman, and Doukas (1997) found similar Black/White differences among a sample of 299 Detroit residents: whereas 76% of White respondents thought that PAS should be legalized, only 56% of Black respondents supported legalizing PAS. However, when the sample was broken down into groups based on a single-item self-reported *importance of religion* on a 4-point scale, the effect of race was no longer significant; racial differences in support of PAS were better explained by religiosity rather than race alone. The authors discuss differences in cultural attitudes and trust in medical care as other possible explanations (besides religion) for racial differences in attitudes toward PAS.

A series of studies looked specifically at Hispanic attitudes toward PAS. One study found an interaction between ethnicity and gender, with Hispanic men supporting PAS and Hispanic women strongly opposing it (Duffy, Jackson, Schim, Ronis, & Fowler, 2006). Overall, Hispanic men reported more favorable attitudes toward PAS than Non-Hispanic Whites and African Americans of both genders. The authors of a study of 194 socioeconomically disadvantaged older Mexican Americans and Non-Hispanic Whites concluded that attitudes may have to do more with socioeconomic status and religiosity than race (Mouton, Espino, Esparza, & Miles, 2000). Although Mexican Americans had less positive attitudes toward PAS compared to their White counterparts, this association was no longer statistically significant after controlling for religiosity and income. What appeared to be racial differences in opposition to PAS were explained by high religiosity and low income. More recently, Espino et al. (2010) found that among a sample of 208 older adults, Mexican Americans were actually *more* likely to agree that

PAS should be allowed than Non-Hispanic Whites (53% versus 34%). There was also a significant interaction between race/ethnicity and gender, such that male Mexican Americans were the most supportive of PAS, whereas religiosity remained the only significant predictive factor among the Non-Hispanic Whites. The authors write that while it is traditionally thought that religiosity is the most significant factor in end-of-life decision-making, their results indicate that other factors, particularly male gender, may also be important in understanding Mexican American attitudes toward PAS.

It is important to note that many studies looking at attitudes toward end-of-life preferences such as MAID or euthanasia are plagued by an underrepresentation of people from minority backgrounds. And when results are reported, there is often coarse categorization of the different ethnicities: individuals tend to be organized into White and non-White (e.g., Emanuel et al., 2000), which does not elucidate differences in attitudes as a reflection of a specific racial or ethnic background.

#### **1.2.4 Gender**

As in other areas, the association between gender and attitudes toward MAID has been inconsistent in research to date. A number of studies with very diverse samples – the general public in the U.S. (Cicirelli, 1998), nurses in Finland (Ryynanen, Myllykangas, Viren, & Heino, 2002), and individuals with dementia in the U.S. (Koenig, Wildman-Hanlon, & Schmader, 1996) – have shown that men are more likely than women to support euthanasia and PAS. A Korean sample of over 3,800 cancer patients, family caregivers, oncologists, and members of the general public found male gender to be consistently associated with approval of active euthanasia and PAS (Yun et al., 2011). No studies appear to have found more positive attitudes toward euthanasia, PAS, or MAID among women.

### **1.2.5 Political ideation**

National data from the general public show that attitudes toward euthanasia break down by political party lines: Republicans (61% in favor) are less likely than Democrats (72% in favor) and Independents (80% in favor) to support a doctor's ability to end a patient's life if the patient requests it (Dugan, 2015). Left/right political ideation is also linked to attitudes toward the practice: whereas 89% of liberals support the practice, only 79% of moderates and 60% of conservatives approve of euthanasia (Wood & McCarthy, 2017). These differences may reflect a general leaning toward more or less progressive policies, or the overlap between conservatism and religiosity, across a range of social issues.

### **1.2.6 Personal experience with death**

Social psychological research suggests that experiences, and memories of those experiences, contribute to the formation of attitudes (Wegener & Petty, 2013). Personal experience with death may be related to attitudes toward MAID if individuals have observed family members or friends navigate the end of life and taken lessons from their observations, either in the direction of support of or opposition to MAID, depending on what they witnessed. Although little empirical research has explored how personal experience with death influences attitudes toward MAID, it is possible that individuals who have had a caregiving role for a friend or family member with terminal illness, or have witnessed a loved one endure pain and suffering at the end of life, may be more supportive of an individual's right to MAID as an end-of-life option. That is, more personal experience with death may be associated with greater comfort with someone taking steps to hasten their death. One empirical study of 378 individuals with HIV found that prior experience with terminal illness in a family member or friend was a strong predictor of considering PAS for themselves (Breitbart, Rosenfeld, & Passik, 1996).

### **1.2.7 Knowledge about MAID**

There are little data on the relationship between knowledge of MAID and attitudes toward MAID, and no studies were found in which participants' factual knowledge of MAID requirements and practices was assessed. Indeed, the vast majority of studies of attitudes start off by providing participants with a definition of a term (e.g. "euthanasia," "physician-assisted suicide") or simply a description of the practice (e.g., "the doctor writes a prescription with which the patient can end their own life" vs. "the doctor injects a lethal dose to end the patient's life") before asking participants about their views. Educating participants on a practice before assessing their attitudes toward the practice makes any objective assessment of what they know impossible. While there is a scarcity of information on public knowledge of MAID practices, research on other topics has found that greater knowledge is associated with more favorable attitudes (e.g., science; Allum, Sturgis, Tabourazi, & Brunton-Smith, 2008) as well as more reserved attitudes (e.g., genetic testing; Calsbeek, Morren, Bensing, & Rijken, 2007). In relation to MAID, it is possible that individuals with more objective knowledge of the procedural safeguards in MAID laws will be more supportive of MAID because they will have fewer false beliefs about the potential for abuse.

## **1.3 Attitudes Among Mental Health Professionals**

Since its inception in the U.S., the practice of MAID has involved mental health providers. For example, in the Death with Dignity legislation passed in Oregon, patients are required to be assessed by a psychiatrist or psychologist if the prescribing physician suspects that the patient may not have decision-making capacity. The law states: "No medication to end a patient's life [...] shall be prescribed until the person performing the counseling determines that the patient is not suffering from a psychiatric or psychological disorder, or depression causing



impaired judgment” (Oregon Measure 16, 1994). All U.S. MAID laws passed since then include similar language (see Table 4). Therefore, because mental health providers may be involved in MAID cases, understanding their attitudes is important, and several previous studies have undertaken such an investigation.

Ganzini, Fenn, Lee, Heintz, and Bloom (1996) conducted a survey of 321 Oregon psychiatrists shortly after passage of the Death with Dignity law in order to document the attitudes of some of the very mental health professionals who might be called upon to assess depression and capacity in patients requesting PAS. Respondents answered questions on their attitudes toward PAS and factors affecting them, their willingness to conduct a psychiatric evaluation for a patient requesting PAS, as well as their confidence in assessing whether a psychiatric disorder was impairing the judgment of a patient requesting PAS. Overall, the authors found considerable support for PAS, with 68% of respondents believing that, at least under some circumstances, a physician should be permitted to write a prescription for a medication whose sole purpose is to allow the patient to end his or her life. Seventy-four percent of the psychiatrists said that they themselves would consider PAS if they had a terminal illness. When describing the conditions under which they might consider PAS for themselves, the physicians cited pain, an inability to care for self, and poor quality of life. Not surprisingly, proponents of PAS were more likely than opponents of PAS to consider PAS for themselves (95% versus 27%).

Overall, exactly half of the psychiatrists reported that they would be willing to perform a psychiatric evaluation of a patient requesting PAS to determine whether a mental disorder was present and impairing judgment. This willingness was different according to position on Oregon’s Death With Dignity ballot measure, Measure 16: 68% of psychiatrists in favor of

Table 4

*Legal Language Regarding Requirements for Psychiatric/Psychological Evaluation of Patients Requesting Medical Aid in Dying*

State or Territory	Verbatim Language from the Statute
Oregon	<p>Section 127.800.3: The individual must be “capable,” meaning that in the opinion of a court or in the opinion of the patient’s attending physician or consulting physician, psychiatrist or psychologist, a patient has the ability to make and communicate health care decisions to health care providers, including communication through persons familiar with the patient’s manner of communicating if those persons are available.</p> <p>Section 127.825.3.03: If in the opinion of the attending physician or the consulting physician a patient may be suffering from a psychiatric or psychological disorder or depression causing impaired judgment, either physician shall refer the patient for counseling. No medication to end a patient’s life in a humane and dignified manner shall be prescribed until the person performing the counseling determines that the patient is not suffering from a psychiatric or psychological disorder or depression causing impaired judgment.</p>
Washington	<p>Section 70.245.020: The individual must be "competent," meaning that, in the opinion of a court or in the opinion of the patient's attending physician or consulting physician, psychiatrist, or psychologist, a patient has the ability to make and communicate an informed decision to health care providers, including communication through persons familiar with the patient's manner of communicating if those persons are available.</p> <p>Section 70.245.060: If, in the opinion of the attending physician or the consulting physician, a patient may be suffering from a psychiatric or psychological disorder or depression causing impaired judgment, either physician shall refer the patient for counseling. Medication to end a patient's life in a humane and dignified manner shall not be prescribed until the person performing the counseling determines that the patient is not suffering from a psychiatric or psychological disorder or depression causing impaired judgment.</p>
Montana	(No requirements specified)
Vermont	Section 5283.F.8: The physician either verified that the patient did not have impaired judgment or referred the patient for an evaluation by a psychiatrist, psychologist, or clinical social worker licensed in Vermont for confirmation that the patient was capable and did not have impaired judgment.
California	Section 443.1.e: The individual must have “capacity to make medical decisions,” meaning that, in the opinion of an individual’s attending physician, consulting physician, psychiatrist, or psychologist, pursuant to Section 4609 of the Probate Code, the individual has the ability to understand the nature and consequences of a health care decision, the ability to understand its significant benefits, risks, and alternatives, and the ability to make and communicate an

California (cont.)	<p>informed decision to health care providers.</p> <p>Section 443.5.A.ii: If there are indications of a mental disorder, the physician shall refer the individual for a mental health specialist assessment, meaning one or more consultations between an individual and a psychiatrist or licensed psychologist for the purpose of determining that the individual has the capacity to make medical decisions and is not suffering from impaired judgment due to a mental disorder.</p>
Colorado	<p>Section 25.48.101.10: The individual must be “mentally capable,” meaning that in the opinion of an individual’s attending physician, consulting physician, psychiatrist or psychologist, the individual has the ability to make and communicate an informed decision to health care providers.</p> <p>Section 25.48.108.2: If the attending physician or the consulting physician believes that he individual may not be mentally capable of making an informed decision, the attending physician or consulting physician shall refer the individual to a licensed mental health professional (a psychiatrist or psychologist) for a determination of whether the individual is mentally capable and making an informed decision.</p>
District of Columbia	<p>Section 2.2: The individual must be “Capable,” meaning that, in the opinion of a court or the patient's attending physician, consulting physician, psychiatrist, or psychologist, a patient has the ability to make and communicate health care decisions to health care providers.</p> <p>Section 4.5: The attending physician shall inform the patient of the availability of supportive counseling to address the range of possible psychological and emotional stress involved with the end stages of life</p> <p>Section 5.a: If, in the opinion of the attending physician or the consulting physician, a patient may be suffering from a psychiatric or psychological disorder or depression causing impaired judgment, either physician shall refer the patient to counseling.</p>
Hawaii	<p>Section 1: The individual must “Capable,” meaning that in the opinion of the patient’s attending provider or consulting provider, psychiatrist, psychologist, or clinical social worker, a patient has the ability to understand the patient’s choices for care, including risks and benefits, and make and communicate health care decisions to health care providers.</p> <p>Section 4.5: The attending will refer the patient for counseling. “Counseling” means one or more consultations, which may be provided through telehealth, as necessary between a psychiatrist licensed under chapter 453, psychologist licensed under chapter 465, or clinical social worker licensed pursuant to chapter 467E and a patient for the purpose of determining that the patient is capable, and that the patient does not appear to be suffering from undertreatment or nontreatment of depression or other conditions which may interfere with the patient’s ability to make an informed decision pursuant to this chapter.</p>

Measure 16 agreed to perform the evaluation, compared to 28% of psychiatrists opposed to Measure 16. Finally, the psychiatrists reported their confidence in their ability to make the assessments that Measure 16 asks of them. When asked about evaluating a patient they were meeting for the first time, only 6% were very confident and 43% were somewhat confident in their ability to determine whether a psychiatric disorder was impairing judgment. The majority of respondents (51%) were not at all confident in their ability to make such a determination. Respondents were more confident if the assessment were to be performed in the context of a long-term relationship with the patient (54% very confident, 41% somewhat confident, and only 4% not at all confident). A very small percentage (3%) of the psychiatrists agreed that a request for PAS from a terminally ill patient was prima facie evidence of a mental disorder.

Fenn and Ganzini (1999) conducted a sister survey a few years later with licensed psychologists in Oregon. Again, the 423 respondents provided information on their personal views on PAS, their professional thoughts regarding the process of psychological assessment for patients who request such assistance, and their opinions regarding Oregon's (at the time) pending PAS legislation. The authors found that there was a high level of support for PAS: 85% of psychologists believed that a physician should be allowed, at least under some circumstances, to write a prescription for a competent terminally-ill patient with the intention of ending their life. Psychologists were asked whether they would consider obtaining a physician's assistance to end their own lives under some circumstances, and 82% said yes. Open-ended responses describing such circumstances found similar patterns to those reported by the psychiatrists in Ganzini et al.'s (1996) previous study (e.g., pain, loss of mental capacities, poor quality of life). Not surprisingly, the authors found strong associations between the *personal* importance of reasons

for the self and the importance of corresponding factors for deciding when assisted suicide should be allowed for *others*.

A majority of respondents (56%) thought that organizations representing psychologists should take no position on the matter. While only 20% of psychologists thought that the implementation of Measure 16 would constitute a threat to the profession of psychology, concerns raised by these individuals included tarnishing psychology's public image (36%), politicization of professional issues (23%), and the risk of becoming "hired gun" specialists (7%).

With regard to performing a psychological evaluation for a patient requesting PAS, 60% of psychologists reported that they would complete the evaluation if requested, whereas 33% indicated that performing an evaluation under Measure 16 would be outside of their scope of practice. Psychologists' level of confidence in performing a PAS assessment varied depending on the context of the situation. Whereas the majority of psychologists who reported they were willing to assess were only "somewhat confident" (58%) in the context of a single evaluation, 84% reported feeling "very confident" in their ability to evaluate in the context of a long-term relationship with the patient. Men were more confident than women in their assessment abilities, and, similar to prior results (Ganzini et al., 1996), only 3% of the sample felt that a request for PAS from a terminally ill patient was *prima facie* evidence of a mental disorder.

The authors conducted hierarchical logistic regression models to determine which of the attitude items were independent predictors of a respondent's position with regard to PAS. Strong opposition to PAS (i.e., should never be allowed) was predicted by six factors: not considering PAS as a personal option, a belief that suicide *per se* was not moral, the view that a physician's role is to preserve life, placing less emphasis on a person's right to self-determination, concern

that PAS might be misused with disadvantaged populations, and younger age. Strong support for PAS (i.e., should always be allowed) was predicted by being more supportive of a person's right to self-determination, more confident that impairment in judgment due to a mental condition could be assessed in a single assessment, and less concerned about allowing the natural dying process to take its course.

Ganzini, Leong, Fenn, Silva, and Weinstock (2000) conducted a third survey of mental health professionals, but this time with a nationwide sample of 290 forensic psychiatrists. They investigated views on the process, thresholds, and standards that mental health professionals should use in assessing terminally ill patients' capacity to consent to PAS. Support for PAS differed according to ethnicity and religion (this survey was the first from the Ganzini research group that asked respondents about their religion). Individuals who indicated that PAS was never acceptable were significantly more religious (mean = 6.6 on a 10-point scale) than those who believed that PAS was sometimes or always acceptable (mean = 4.7). Among Caucasian respondents, only 32% thought that PAS was never acceptable, compared to 63% of non-Caucasian respondents. Specific racial and/or ethnic groups were not reported, other than "non-Caucasian." There were no significant differences in views on PAS according to age, gender, or years in practice.

Regarding their views on the role of mental health evaluations in determining competence of patients requesting PAS, 39% believed that a mental health evaluation should be required in all cases, and 24% believed that psychiatrists' participation in determining competence would be unethical. Finally, respondents expressed their opinions on the relationship between certain mood disorders and decision-making capacity for PAS. In the case of a patient with Major Depressive Disorder, 58% of psychiatrists believed in automatic determination of

incompetence. Lower percentages of respondents believed in automatic incompetence due to dysthymia (29%) or an adjustment disorder with depressed mood (29%). Building upon these three landmark studies, DiPasquale and Gluck (2001) led an investigation into New Mexico psychologists' and psychiatrists' attitudes toward PAS, as well as the relationships between attitudes and willingness to perform competency evaluations of patients requesting such assistance. The authors found that three fourths (75%) of respondents supported legalization of PAS, and 60% of respondents would be willing to perform what they described as a "psychological fitness evaluation" of a patient considering PAS. Participants were also asked to select the most credible argument both *for* and *against* legalizing PAS. The most persuasive statement in favor was that a patient has "a right to autonomous control over his or her life." This was the most commonly selected statement, regardless of whether respondents had described themselves as being *willing* or *unwilling* to assist a patient seeking PAS. When the professionals were asked to select the most persuasive argument against PAS, however, respondents were split according to their willingness/unwillingness to assist. Those who were *not* willing to assist were most likely to select "the life belongs to God, not the patient" as the most compelling argument against PAS, whereas those who *were* willing to assist in PAS most commonly selected "the potential for abuse outweigh any benefits." When reporting on their ability to recognize depression in a patient requesting PAS, only 57% of the psychologists and psychiatrists indicated they were confident in their ability to do so; 32% reported they weren't sure whether they could recognize depression, and the remaining 11% were not confident.

A more recent empirical investigation of licensed psychologists' attitudes toward and experiences with PAS examined self-perceptions of competence among psychologists in Oregon and Montana, two states where MAID is currently legal (Johnson, Gardner, Cramer, & Nobles,

2015). Participants in this study were provided with a series of vignettes to assess their judgment in assessing patient competence to participate in PAS. Across the vignettes, the investigators varied scores on instruments typically used to assess competence: an intelligence test (Wechsler Adult Intelligence Scale-IV, Full Scale IQ), a depression scale (Beck Depression Inventory-II), and four components of competence assessed by the MacArthur Competence Assessment Tool for Treatment (MacCAT-T). The authors found patients who had higher IQ and MacCAT-T scores, and lower BDI-II scores, were rated by participants as more competent to request PAS.

To summarize the prior research with mental health professionals, a majority of psychologists and psychiatrists are in favor of MAID under certain circumstances, consistent with the general public. In addition, there is an association between individuals' personal beliefs and their willingness to participate in MAID evaluations. Specifically, individuals who would be interested in utilizing MAID for themselves are more likely to support patients' ability to utilize MAID and are more willing to perform a capacity evaluation for patients seeking MAID. Mental health professionals who self-report that religion is important to them are less likely to believe in the moral acceptability of MAID and less likely to be willing to perform a capacity evaluation. A relatively low proportion of mental health professionals are confident in their ability to discern depression in patients requesting MAID or assess competence to choose this option. At the moment, there is no consensus on guidelines for assessing capacity in patients requesting MAID, though several have been proposed (Farrenkopf & Bryan, 1999; Werth, Benjamin, & Farrenkopf, 2000). How the mental health community moves forward with regard to ethically, validly, and reliably assessing capacity in patients requesting MAID has yet to be determined, yet the demand for these evaluations has risen and will likely continue to rise.



## 1.4 The Present Study

The purpose of the current study was to replicate and update previous surveys of mental health professionals' attitudes toward MAID by sampling a more contemporary and geographically diverse group of clinical psychologists. Five new U.S. states/territories (Vermont, California, Colorado, Washington D.C., Hawaii) have legalized MAID since the last study published on psychologist attitudes (Johnson et al., 2015). This research is important because some psychologists are involved in educating patients regarding MAID and conducting psychological evaluations of patients requesting MAID. Even in states where the practice is not legal, some psychologists are likely to encounter questions from patients about hastened death. As professional organizations develop ethical and practice guidelines in this area, it would be helpful to understand psychologists' contemporary attitudes toward these issues.

Based on the previous research presented above, the following hypotheses were formulated for the current study. Hypothesis 1: support for MAID will be significantly associated with lower age, male gender, Caucasian race/ethnicity, lower religiosity, and more left/liberal political orientation. Hypothesis 2: support for MAID will be significantly associated with practicing in a state where MAID is legal, greater factual knowledge of MAID laws, more personal experience with death, and more professional experience working with individuals with terminal illness. Hypothesis 3: willingness to conduct a psychology evaluation of a patient requesting MAID will be associated with more favorable attitudes toward MAID and higher confidence in assessment abilities.

# **Chapter 2: Method**

## **2.1 Participants**

Participants were licensed psychologists in the United States. Recruitment involved two sources: 1) special interest email listservs for psychologists who likely interact with patients with serious illness, and 2) a general email listserv of clinical psychologists. The email listservs used for targeted recruitment of specialist psychologists are listed in Table 5. All of the email listservs were available for use by members (and the principle investigator was a member), or permission had been granted to contact members, or individuals who had access to these listservs agreed to send the survey out. Generalist licensed psychologist recruitment was conducted via an email sent out to the listserv for the Society of Clinical Psychology (American Psychological Association, Division 12). A prospective power analysis was performed for sample size estimation using the statistical software package G\*Power 3.1 (Faul, Erdfelder, Lang, & Buchner, 2007). Previous studies of mental health professionals' attitudes toward euthanasia and PAS have found effects sizes between  $\omega = 0.92-3.12$  (Ganzini et al., 1996),  $\omega = 0.51-2.02$  (Fenn & Ganzini, 1999), and  $\omega = 0.41-0.96$  (Ganzini et al., 2000) for  $\chi^2$  statistics. Such effect sizes are considered by conventional standards to be large to medium-large (Cohen, 1988). With alpha ( $\alpha$ ) = 0.05 and Power ( $1 - \beta$ ) = 0.8, the projected sample size needed in the current study to detect a medium effect for  $\chi^2$  statistics was  $N = 108$ . Thus, a proposed sample size of  $N = 120$  was projected to be adequate for the main objectives of this study. The target sample size was doubled to 240 to allow for additional subgroup analyses.

Table 5

*Special Interest Email Listservs Used for Targeted Recruitment of Licensed Psychologists*

Email Listserv	Position of Sender
American Psychosocial Oncology Society (APOS)	Executive Director of APOS
Psychologists in Long-Term Care (PLTC)	Membership Coordinator of PLTC
Gerontological Society of America (GSA) Hospice, Palliative, and End-of-Life Care Special Interest Group	Principle Investigator
Veterans Administration (VA) Palliative Care Psychologists	Palliative Care psychologist at St. Louis VA
VA Community Living Center Mental Health Providers	Palliative Care psychologist at St. Louis VA
Council of Professional Geropsychology Training Programs (CoPGTP)	Chair of CoPGTP
Society of Clinical Geropsychology (American Psychological Association (APA), Division 12, Section 2)	Principle Investigator
Association of Psychologists in Academic Health Centers (APA, Division 12, Section 8)	Principle Investigator
Psychology and Aging Network (APAGENET)	Director of APA Office on Aging
Advisors to the American Psychological Association's Working Group on End-of-Life Issues and Care	Director of APA Office on Aging

## 2.2 Measures

The questionnaire protocol used in the current study was a modified and expanded version of the surveys used by the Ganzini research group (Fenn & Ganzini, 1999; Ganzini et al., 1996; Ganzini et al., 2000) in studies that had similar aims to the current study. See the Appendix for the full set of survey items.

### 2.2.1 Demographics

Demographic variables included age, gender identity, race/ethnicity, and education.

### 2.2.2 Religiosity

Participants reported their religious affiliation from a list of nine major religious groups and were given the opportunity to write in their religion if they were affiliated with a religious group that was not listed. They also completed the Duke University Religion Index (DUREL; Koenig, Parkerson, & Meador, 1997). The DUREL is a 5-item measure of religiosity that assesses for both organizational (e.g., attendance at religious services) and nonorganizational (e.g., frequency of prayer) components of religion, as well as what the authors call *intrinsic* religiosity dimensions (e.g., “I experience the presence of the Divine”). The first two items (religious attendance and frequency of prayer) are rated on a scale from 1 (*Never*) to 6 (*More than once a week*); the remaining three items on intrinsic religiosity are rated on a scale from 1 (*Definitely not true*) to 5 (*Definitely true*). Items are summed to create a composite score that ranges from 5 to 27, with higher numbers indicating greater religiosity. Exploratory factor analysis and confirmatory factor analysis have supported a one factor model for the DUREL, which has been shown to have good validity and reliability (Storch et al., 2004). Internal consistency in the current sample was excellent (Cronbach’s  $\alpha = 0.91$ ).

### **2.2.3 Political attitudes**

Political orientation was assessed using a single item, “Where do you stand with regard to your political attitudes?” Respondents rated their political orientation using a 10-point scale, with 1 corresponding to *very left/liberal* and 10 corresponding to *very right/conservative* (Kroh, 2007).

### **2.2.4 Clinical practice information**

For descriptive purposes, five items were used to gauge information about participants’ clinical practice: how many patients/clients they see per week, their practice setting (e.g., inpatient consultation, hospice, community mental health), years in practice as a psychologist, estimated number of current patients/clients with terminal illness, and estimated number of patients/clients they have had die of terminal illness in the past year.

### **2.2.5 Personal experience with death**

Two items were used to assess personal experience with death: “Have you ever had a caregiving role for a family member or friend who had a terminal illness?” rated on a scale from 1 (*Not involved in care*) to 4 (*Primary caregiver*), and “Have you ever had experience with a family member or friend who experienced significant pain and/or suffering while dying?” rated with the same *Yes/No* response format used by Ganzini et al. (2000).

### **2.2.6 Attitudes toward hastened death**

Participants rated their beliefs regarding five specific actions physicians should or should not be permitted to do if requested by a competent, terminally ill patient. Items were taken from Fenn & Ganzini (1999) and included: withhold (not start) life sustaining treatment, stop life sustaining treatment, withdraw artificial nutrition and hydration, use analgesics in dosages which may hasten death, and write a prescription whose sole purpose would be to allow the patient to

end his/her life. The response format was changed from the original three categories (*Never/Under some circumstances/Always*) to a 5-point scale (1 = *Never*, 2 = *Under rare circumstances*, 3 = *Under some circumstances*, 4 = *Under most circumstances*, 5 = *Always*) in the current study to capture more nuance in participant attitudes. The five items were highly intercorrelated (Cronbach's  $\alpha = 0.87$ ).

### **2.2.7 Objective knowledge of MAID laws**

Ten questions were used to assess participants' objective knowledge of facts about current MAID laws. Items were written by the principle investigator based on six state laws (Oregon's Death with Dignity Act, Washington's Death with Dignity Act, Vermont's Patient Choice and Control at the End of Live Act, California's End of Life Option Act, Colorado's End of Life Option Act, Washington D.C.'s Death with Dignity Act). Of note, Hawaii passed the Our Care Our Choice Act after the writing of the knowledge items, and thus was not included in the creation of the content. Questions reflected commonalities in all six state laws (e.g., requirement of the presence of a terminal illness, patient has less than six months to live) and were presented in a True/False format. Respondents were given the option to select "Don't Know" (scored as 0 points) to discourage guessing. After respondents answered each item, whether they got it right, wrong, or replied that they didn't know, the correct answer was displayed. Items were summed to yield a total score from 0 – 10, with higher numbers reflecting more objective knowledge of MAID laws. These items were presented before the attitudinal measures to ensure some common level of knowledge among respondents, regardless of their prior experience with MAID.

### **2.2.8 Attitudes toward MAID**

Immediately following the knowledge quiz, respondents were presented with a summary description of MAID: "In the U.S., medical aid in dying is a practice by which an individual who

is at least 18 years old, has capacity to make their own medical decisions, diagnosed with a terminal illness, and estimated to have less than six months to live, can request and receive a medication from their physician which they can voluntarily self-administer (swallow) *with the intention of ending their life*” [underlined and italicized text present in the original]. Attitudes toward MAID were assessed with the following three questions: 1) “Do you think medical aid in dying should be legal?”, 2) “Do you think medical aid in dying is ethical?”, and 3) “Do you want to have medical aid in dying as an end-of-life option available to you?” Similar to Fenn and Ganzini (1999), respondents could choose from *No/Under some circumstances/Yes*.

### **2.2.9 Safeguards and professional organizations’ stance on MAID**

Taken directly from Fenn and Ganzini (1999), six questions investigated respondents’ attitudes toward different components of MAID laws. One item assessed overall position with regard to MAID laws being enacted in the U.S. (from 1 = *Strongly oppose* to 5 = *Strongly favor*), three questions asked about agreement with the adequacy of some of the legal safeguards of MAID laws (from 1 = *Strongly disagree* to 5 = *Strongly agree*), one item asked whether professional organizations representing psychologists should take a stance on the matter (*Against/No position/For*), and a final item asked whether psychologists’ involvement in MAID constitutes a threat to the profession of psychology (*Yes/No*).

### **2.2.10 Factors contributing to requests for MAID**

Respondents were asked to rate the extent to which they agreed with the legitimacy of seven end-of-life concerns that could contribute to patients requesting MAID. Items were taken directly from several official reporting forms that physicians who write prescriptions for MAID must turn in to their state for tracking purposes (District of Columbia Department of Health, 2018; Oregon Center for Health Statistics, 2017; Washington State Department of Health, 2017).

For each of the concerns, respondents used a five-point scale to rate the extent to which they *Strongly Disagree* (1), *Disagree* (2), *Neither agree or disagree* (3), *Agree* (4), or *Strongly Agree* (5) that each concern is a legitimate reason for a patient to request MAID.

### **2.2.11 Psychological evaluation of patients requesting MAID**

These questions investigated respondents' views on psychological evaluation of patients requesting MAID. Willingness to evaluate a patient requesting MAID was assessed using the following question: "Assume that you were asked to perform a psychological evaluation of a patient requesting medical aid in dying to determine whether they are suffering from a psychiatric or psychological disorder or depression causing impaired judgment. Which of the following best describes how you would respond?" Participants could choose either *Willing* or *Unwilling*, and if *Unwilling*, why (*Ethically opposed*, *Outside of practice area*, or *Both*). Clinician confidence in their ability to conduct a psychological assessment was assessed using two questions taken from Fenn and Ganzini (1999), with the original phrase "physician-assisted suicide" replaced with "medical aid in dying." The questions were worded as follows: "How confident are you that [within the context of a single evaluation/given a long-term relationship with a patient] you could adequately assess whether or not a psychological disorder was impairing the judgment of a patient who was requesting medical aid in dying?" Respondents chose from 1 (*Not at all confident*) to 5 (*Very confident*).

## **2.3 Procedure**

Potential participants were contacted via the listservs described in the Participants section. Data were collected via the online survey platform Qualtrics. A link to the online questionnaire was provided to potential participants via an email that described the purpose of the study and reviewed elements of informed consent. To prevent double responding, multiple



entries from the same computer were monitored using the IP address tracking feature in Qualtrics. After completing the survey, participants were given the option to enter a lottery to win a \$100 gift card for their participation.

## **2.4 Data Analysis**

Participants who only completed a portion of the survey were excluded from data analysis, for reasons described below. Descriptive statistics were conducted on sociodemographic and clinical practice information to characterize the sample, and all variables were examined for outliers and tested for normality. Descriptive statistics (means and standard deviations for continuous variables, percentages for categorical variables) were also calculated for all outcome variables: attitudes toward hastened death, objective knowledge of MAID laws, safeguards and professional organizations' stance on MAID, factors contributing to requests for MAID, and psychological evaluation of patients requesting MAID. A one-way repeated measures (within-subjects) ANOVA was conducted to examine differences between legitimacy ratings for factors contributing to requests for MAID. Two multiple linear regressions were conducted to determine overall level of variability in support for MAID accounted for by sociodemographic characteristics, and knowledge and experience variables, respectively. A series of bivariate statistics (independent samples t-tests) were conducted to examine differences in attitudes and confidence ratings between participants who were willing vs. unwilling to conduct a psychological evaluation of a patient requesting MAID.

# Chapter 3: Results

## **3.1 Sociodemographics and Clinical Practice Information**

A total of 298 people clicked on the survey link between January 1 and April 1, 2018. Ten individuals did not advance beyond the first page of the online survey, thus answering zero questions. Thirteen individuals answered “No” to the inclusion criteria question, “Are you a licensed psychologist?” Twenty-seven people started the survey but did not finish it, leaving incomplete data. A total of 248 licensed psychologists from 36 different states finished the survey and were included for data analysis. The 27 individuals who did not complete the survey were not significantly different than individuals who did complete the survey with respect to age,  $t(269) = 0.79, p = 0.43$ , gender (female vs. male),  $\chi^2(1) = 0.68, p = 0.41$ , or degree (Ph.D. vs. Psy.D.),  $\chi^2(1) = 0.51, p = 0.47$ . Significance testing for differences in race/ethnicity were unable to be conducted due to insufficient cell counts. The majority of noncompleters ( $17/27 = 63\%$ ) filled out less than one third of the survey. Given the lack of significant differences in demographic variables between completers and noncompleters and the sufficient statistical power achieved by the sample of the 248 completers, participants with incomplete data were dropped from the dataset.

Sociodemographic characteristics of the final sample are provided in Table 6. Participants had a mean age of 47 years ( $SD = 14$ , range = 28 - 91), and the majority were female (73%). Fourteen percent of the sample was non-White, 86% was White/Caucasian. The most common degree was Ph.D. (79%), followed by Psy.D. (21%). The most common religious affiliations were Protestant (16%), Catholic (16%), and No Religion (16%). Participants’ mean score out of a possible 27 on the Duke Religion Index was 12.5 ( $SD = 6.4$ , range = 5 – 27). On the 10-point, single-item left-right political orientation scale, participants’ mean score was 3.0 ( $SD = 1.6$ ,

Table 6

*Sociodemographic Characteristics of the Sample (N = 248)*

Variable	<i>M/N</i>	<i>SD/%</i>
Age (yrs)	47	14
Gender		
Female	181	73%
Male	67	27%
Transgender	0	0%
Race/Ethnicity		
Asian/Asian-American	15	6%
Black/African-American	2	<1%
Hispanic	11	4%
Native American	1	<1%
White/Caucasian	214	86%
Multiracial	3	1%
Other	2	<1%
Education		
PhD	195	79%
PsyD	53	21%
Religious affiliation		
Agnostic	28	11%
Atheist	30	12%
Buddhist	6	2%
Catholic	39	16%
Hindu	3	1%
Jewish	28	11%
Muslim	2	<1%
Non-denominational Christian	6	2%
None	43	18%
Protestant	39	16%
Unitarian Universalist	6	2%
Other/Multifaith	16	7%
Duke Religion Index (5-27)	12.5	6.4
Political orientation (1-10)	3.0	1.6

range = 1 – 9), indicating a general trend toward Left/Liberal (as opposed to Right/Conservative) in this sample.

With regard to clinical practice, the average length of time practicing was 15 years ( $SD = 13$ , range = <1 - 63), and the average number of clients/patients seen per week was 15 ( $SD = 11$ , range = 0 - 50). See Table 7 for clinical practice information. The most common practice settings were private practice (28%), medical inpatient consultation (21%), and nursing home (17%).

There was broad range in both the number of patients currently seen with terminal illness expected to live less than six months ( $M = 5$  patients,  $SD = 10$ , range = 0 – 100) and the number of patients who had died from a terminal illness in the past year ( $M = 9$  patients,  $SD = 22$ , range = 0 – 200). One hundred and sixty-nine psychologists (69%) identified as having formal training (e.g., coursework, clinical practicum, internship rotation, postdoctoral fellowship, post-licensure training, etc.) working with individuals with serious, life-threatening, or terminal illness; or training in end-of-life care, such as psycho-oncology, palliative care, or hospice. Participants were licensed to practice psychology in 36 different states (see Table 8), with the most common states being California (12%), New York (8%), Washington (6%), and Pennsylvania (6%). Twenty-four percent of the sample was licensed in states where MAID is currently legal.

## **3.2 Personal Experiences**

Fifty-three percent of the sample ( $n = 132$ ) had served a personal caregiving role for a family member, friend, or loved one with a terminal illness: 11% had helped arrange care, 32% had assisted in care, and 11% had acted as the primary caregiver. Over half the sample (54%) reported having a personal experience with a family member or friend who experienced significant pain and/or suffering while dying. Participants who had served some type of

Table 7

*Clinical Practice Information*

Variable	<i>M/N</i>	<i>SD/%</i>
Length of time in practice (yrs)	15	13
Average number of clients/patients seen per week	15	11
Practice setting		
Assisted living	12	5%
Community mental health or public setting	25	10%
Health maintenance organization	6	2%
Home-based	16	6%
Jail or prison	4	2%
Medical inpatient consultation	52	21%
Nursing home	42	17%
Private practice	69	28%
Psychiatric inpatient	7	3%
School (up through grade 12)	3	1%
University or college	34	14%
Other	89	36%
Number of clients/patients in current practice with terminal illness	5	10
Number of clients/patients who have died in the past year	9	22
Formal training in end of life? (Yes)	169	69%

*Note.* Practice setting percentages do not add up to 100% due to some respondents practicing in multiple settings.

Table 8

*States in Which Participants are Licensed*

State	Number of Licensed Psychologists	Percentage of Total Sample
Alabama	4	2
Arizona	3	1
California*	29	12
Colorado*	10	4
Delaware	3	1
Florida	10	4
Georgia	4	2
Illinois	13	5
Indiana	7	3
Iowa	2	<1
Kansas	7	3
Kentucky	2	<1
Louisiana	2	<1
Maryland	2	<1
Massachusetts	8	3
Michigan	11	5
Minnesota	6	2
Mississippi	4	2
Missouri	14	6
Nevada	3	1
New Jersey	4	2
New Mexico	3	1
New York	19	8
North Carolina	5	2
Ohio	7	3
Oklahoma	1	<1
Oregon*	4	2
Pennsylvania	15	6
Rhode Island	1	<1
South Carolina	4	2
Tennessee	5	2
Texas	6	2
Vermont*	1	<1
Virginia	4	2
Washington*	15	6
Wisconsin	6	2

*Note.* \* indicates a state where MAID is currently legal.

caregiving role were significantly more likely to have witnessed the pain/suffering of a loved one than those who had not been involved in caregiving (67% vs. 38%,  $\chi^2(1) = 21.60, p < .001$ ).

### **3.3 Factual Knowledge of U.S. MAID Laws**

Participants scored an average of 6.8 points out of 10 on the True/False/Don't Know questions assessing their factual knowledge of current U.S. MAID laws ( $SD = 2.1$ , range = 0 - 10). See Table 9 for individual item response rates. "Don't Know" responses were scored as incorrect, and the Kuder-Richardson Formula 20 (KR-20) measure of internal consistency for measures with dichotomous items was 0.67. This value is an acceptable level of internal consistency for a scale of knowledge, when responses across individual items may be more idiosyncratic than in a more unidimensional scale (e.g., depression) (Taber, 2018). Though most participants performed well (modal score = 8 out of 10 correct), there was a significant percentage of the sample that responded "Don't Know" to certain items, including those about age criteria, prognosis, and required waiting period. For other items, there was clear misinformation: the majority of the sample (56%) falsely believed that all patients who request MAID are required to undergo a psychological evaluation by a mental health professional. Similarly, 45% of the sample falsely believed that if a patient is unable to self-administer the medication (swallow it by themselves), he or she is allowed to receive help from a family member or the medical team.

Knowledge of MAID was significantly though modestly higher among participants licensed in states where MAID is currently legal ( $M = 7.76, SD = 1.63$ ) than participants licensed in states where MAID is not legal ( $M = 6.44, SD = 2.14$ ),  $t(246) = 4.37, p < .001$ . Knowledge of MAID was also significantly higher among individuals who had served as a personal caregiver ( $M = 7.02, SD = 2.12$ ) compared to those who had not ( $M = 6.46, SD = 2.05$ ),  $t(246) = 2.10, p <$

Table 9

*Individual Item Response Rates for Factual Knowledge about Medical Aid in Dying Laws*

Item	Correct (%)	Incorrect (%)	Don't Know (%)
1. Medical aid in dying is currently legal in some U.S. states. (True)	91	3	6
2. You must be at least 18 years old to receive medical aid in dying in the U.S. (True)	69	3	28
3. It is not necessary to be diagnosed with a terminal illness to receive medical aid in dying. (False)	68	19	13
4. Individuals must have less than 6 months estimated to live in order to receive medical aid in dying. (True)	66	7	27
5. Individuals wishing to receive medical aid in dying must make two requests, with a waiting period of at least 15 days in between the first and second request. (True)	63	4	33
6. If a patient is unable to self-administer the medication (swallow it by themselves), they are allowed to receive help from a family member or the medical team. (False)	36	45	19
7. All patients who request medical aid in dying are required to undergo a psychological evaluation by a mental health professional. (False)	26	56	18
8. If a patient is suffering from a psychological disorder that is impairing their judgment, they are not eligible to receive medical aid in dying. (True)	76	7	17
9. Once an individual makes a request for medical aid in dying, they can change their mind at any time. (True)	97	1	2
10. Physicians and other health care professionals are required by law to participate in medical aid in dying in states where it is legal. (False)	84	2	14



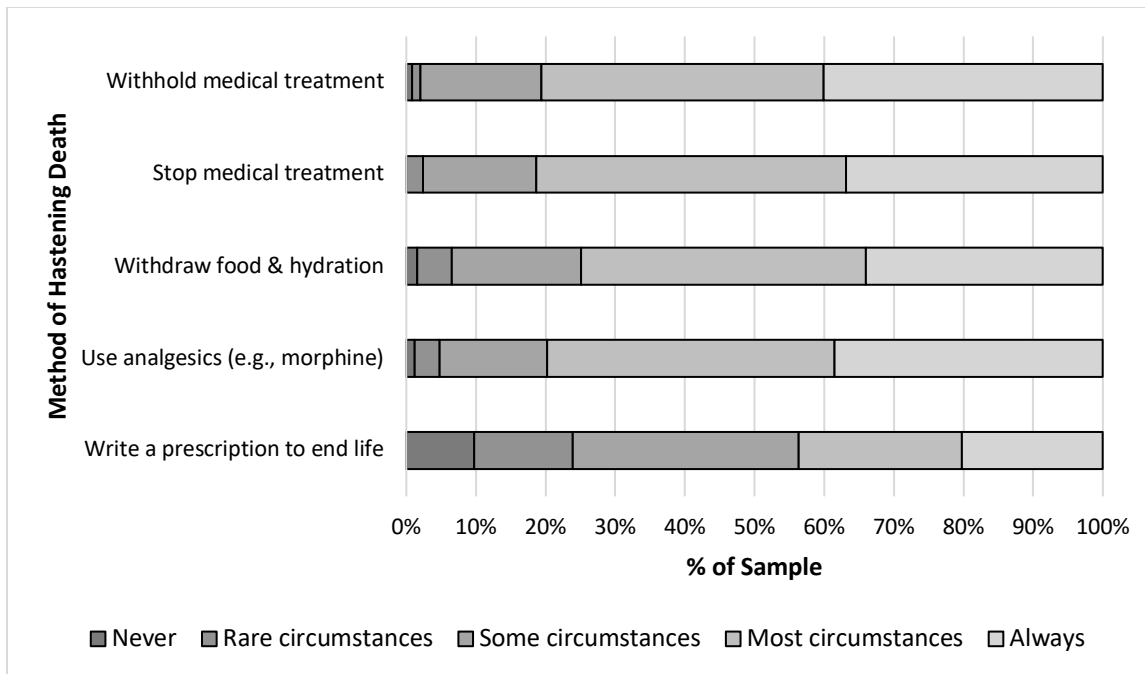
.05. Furthermore, knowledge was significantly higher among individuals who had witnessed the pain and suffering of a family member while dying ( $M = 7.03$ ,  $SD = 1.95$ ) than those who had not ( $M = 6.43$ ,  $SD = 2.23$ ),  $t(246) = 2.24$ ,  $p < .05$ . There were no other significant differences in knowledge of MAID based on gender, race/ethnicity, degree type, formal training, or age.

### **3.4 Attitudes Toward Different End-of-Life Options That May Hasten Death**

Overall, the vast majority of respondents reported that they believed the use of actions or inactions to hasten death should be permitted, or at least permitted in certain circumstances (see Figure 1). All questions were preceded with, “*If requested by a competent, terminally-ill patient, do you believe a physician should be permitted to...*”. Very few (0-2%) opposed withholding treatment, stopping treatment, withdrawing food and hydration, or using analgesic medications to relieve pain in dosages that could hasten death. However, if the specific purpose of providing medication was to allow the patient to end his or her own life, opposition rose (10%).

### **3.5 Attitudes Toward MAID**

Once participants had been provided with the correct answers for all 10 of the knowledge items, 92% of the sample replied that the practice should be legal or legal under some circumstances (69% and 23%, respectively); eight percent of the sample replied that MAID should not be legal. With regard to the ethics, 94% of the sample reported that MAID is ethical or ethical under some circumstances (68% and 26%, respectively); six percent of the sample reported that MAID is not ethical. With regard to whether participants were personally interested in access to MAID for the self, 88% of the sample responded yes or yes under some



*Figure 1.* Percent of the sample endorsing each of the answer options for how frequently five distinct methods of (intentionally or unintentionally) hastening death should be allowed. Each of the five methods were preceded by the following stem: “If requested by a competent, terminally-ill patient, do you believe a physician should be permitted to do the following?”

circumstances (72% and 16%, respectively); twelve percent of the sample responded that they were not interested in having access to MAID for themselves.

## **3.6 Views on the Laws, Safeguards, and Organizations**

### **Representing Psychologists**

When participants were asked their overall position with regard to MAID laws being enacted in the U.S., the modal response was Strongly Favor (49%), followed by Favor (32%), Neutral (10%), Oppose (6%), and Strongly Oppose (4%). The proportion of respondents in favor to any degree (81%) was slightly lower than the number of respondents noted above who said MAID should be legal or legal under some circumstances (92%), suggesting opinions across questions were largely consistent. Participants were asked to rate the extent to which they agreed or disagreed with three statements regarding MAID safeguards on a 5-point Likert-type scale (1 = *Strongly disagree*, 2 = *Disagree*, 3 = *Neither agree nor disagree*, 4 = *Agree*, 5 = *Strongly agree*). The modal response was Neither Agree Nor Disagree for the statement that the safeguards contained in the current U.S. laws are adequate ( $M = 3.3$ ,  $SD = 1.0$ ). The most frequent response was Disagree that there should be a requirement that the family be informed of the patient's intent to end his/her own life ( $M = 2.8$ ,  $SD = 1.0$ ), and Agree that the two-week waiting period is adequate to prevent transitory desire to end life ( $M = 3.4$ ,  $SD = 1.0$ ). Fifteen percent of the sample believed that psychologists' participation in the process of MAID could adversely affect public perception of the profession and constitute a threat to the profession of psychology. Forty percent of the sample thought that professional organizations representing psychologists should take No Position with regard to MAID. Among the 60% who thought that

professional organizations *should* take an official position on MAID, 55% thought that they should be in favor and 5% opposed.

### 3.7 Legitimacy of Patient Concerns to Request MAID

Participants rated the degree to which they believed various patient concerns were legitimate reasons to request MAID on a scale from 1 (*strongly disagree*) to 5 (*strongly agree*) (see Figure 2). A one-way repeated measures (within-subjects) ANOVA was conducted to examine differences between legitimacy ratings. Given that Mauchly's Test of Sphericity was significant ( $p < .001$ ), and thus sphericity could not be assumed, the Greenhouse-Geisser correction was applied to adjust the degrees of freedom. The overall ANOVA was significant,  $F(3.65, 900.92) = 127.42, p < .001, \eta_p^2 = 0.34$ , indicating that mean legitimacy ratings differed significantly among reasons for a MAID request. Post hoc tests using the Bonferroni correction to account for multiple comparisons revealed that "concern about the financial cost of treating or prolonging terminal condition" ( $M = 2.9, SD = 1.2$ ) was rated as significantly less legitimate than all six other reasons to request MAID ( $M_{diff}$  scores were between -0.45 and -1.44,  $p$ 's  $< .001$ ). Additionally, "concern about the physical or emotional burden on family, friends, or caregivers" ( $M = 3.3, SD = 1.2$ ) was also seen as a relatively less legitimate reason to request MAID than the remaining five concerns ( $M_{diff}$  scores were between -0.56 and -0.98,  $p$ 's  $< .001$ ). "Concern about inadequate pain control at the end of life" ( $M = 4.3, SD = 0.9$ ) was rated as significantly more legitimate than all other reasons to request MAID ( $M_{diff}$  scores were between 0.21 and 1.44,  $p$ 's  $< .001$ ), though overall legitimacy ratings of all other reasons were still relatively high.

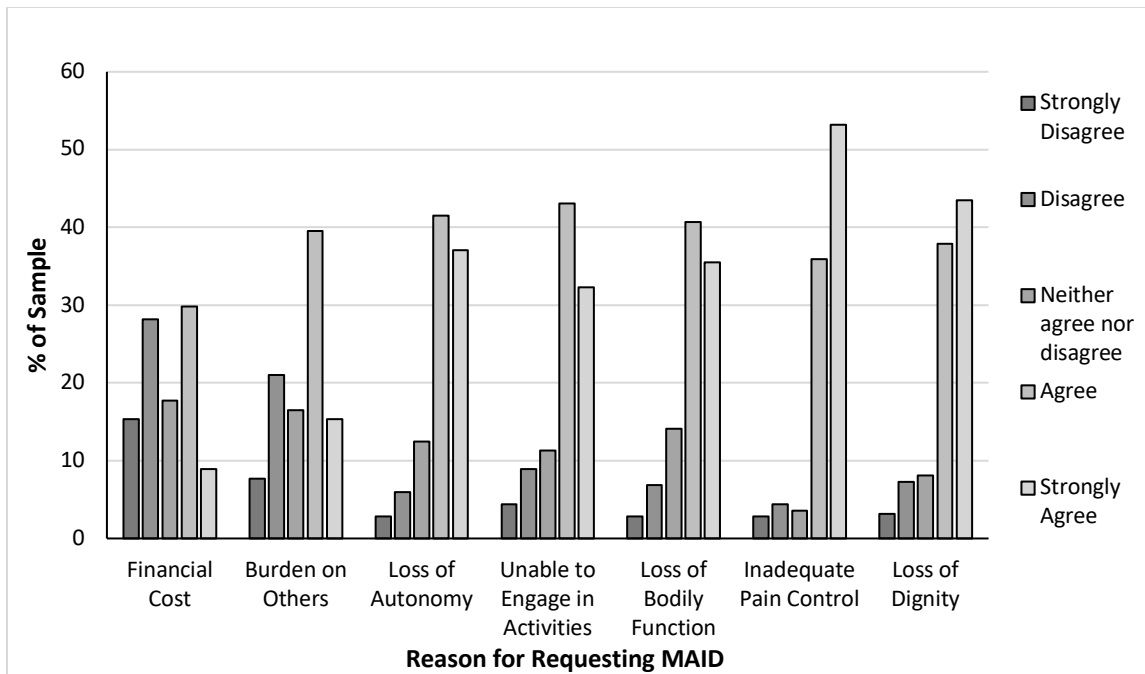


Figure 2. Perceived legitimacy of patient reasons to request MAID. Participants responded to the prompt, “I believe that the following patient concerns are legitimate reasons to request medical aid in dying...”

### 3.8 Psychological Evaluation of Patients Requesting MAID

Fifty-six percent of the sample ( $n = 139$ ) reported that they would agree to perform a psychological evaluation of a patient requesting MAID, indicating because it was both inside their practice area and they were not ethically opposed to it. The 44% ( $n = 109$ ) who said they would refuse to perform the psychological evaluation were composed of 34% of the total sample who said it was outside of their practice area, 6% who said they were ethically opposed, and 4% who gave both reasons. Individuals who agreed to perform the evaluation were significantly more likely to have formal training in working with patients with serious, life-threatening, or terminal illness (79%) compared to those who declined the evaluation (56%),  $\chi^2(1) = 14.76, p < .001$ . When asked to rate their confidence in their ability to conduct such a psychological evaluation on a scale from 1 (*not at all confident*) to 5 (*very confident*), the mean score was 2.9 ( $SD = 1.1$ , range: 1 – 5) in the context of a single evaluation, and  $M = 4.0$  ( $SD = 1.0$ , range: 1 – 5) in the context of a long-term relationship with a patient. Participants who indicated that conducting such an evaluation was outside of their practice area were significantly less confident in their ability to assess than those who indicated that such an evaluation would be inside their practice area, in the context of a single evaluation ( $M_{diff} = 1.2, t(246) = 9.47, p < .001$ ). This finding was also true, though to a lesser extent, in the context of a long-term relationship with the patient ( $M_{diff} = 0.56, t(246) = 4.56, p < .001$ ).

### 3.9 Predictors of Support for MAID

For the following analyses, support for MAID refers to the Likert-type scale which participants used to answer the question, “What is your position with regard to MAID laws being enacted in the U.S.?” from 1 (*Strongly oppose*) to 5 (*Strongly favor*). See Table 10 for bivariate

Table 10

*Bivariate Correlations Between Independent Variables and Support for MAID*

Independent Variable	Pearson r	<i>p</i>
Age	0.05	0.47
Number of years in practice as a licensed psychologist	0.02	0.71
Number of patients seen per week	0.00	0.98
Number of patients in current practice with terminal illness	-0.10	0.15
Number of patients who have died of terminal illness in the past year	-0.11	0.10
Level of personal caregiving provided (1-4)	-0.02	0.71
Knowledge of factual MAID laws facts (0-10)	0.02	0.76
Religiosity (5-27)	-0.37	<0.01
Political orientation (1-10)	-0.28	<0.01

correlations between continuous independent variables and support for MAID. According to Hypothesis 1, support for MAID will be predicted by sociodemographic characteristics. Specifically, older age, non-White race/ethnicity, and greater religiosity would be negatively associated with support for MAID, while male gender and left-liberal political orientation will be positively associated with support for MAID. A multiple linear regression with the five above-named independent variables entered simultaneously was significant ( $F(5, 236) = 10.78, p < .001$ ) and accounted for 19% of the variance in support for MAID ( $R^2 = 0.19$ ) (see Table 11). Both religiosity and political orientation were significantly associated with support for MAID.

According to Hypothesis 2, support for MAID will be predicted by prior knowledge and experience. Specifically, respondents who have greater objective knowledge of current MAID laws, practice in states where MAID is legal, have more personal experience with caregiving and death, and more professional experience working with patients with terminal illness will be more likely to support MAID. A multiple linear regression predicting support for MAID based on knowledge and experience variables was conducted. Independent variables entered into the model were knowledge, practicing in a state where MAID is legal, level of personal caregiving, exposure to other pain/suffering while dying, number patients with terminal illness in current practice, number of patients who have died of terminal illness in the past year, and formal training working with patients at the end of life. The multiple regression predicting support for MAID based on knowledge and experience variables entered simultaneously was not significant,  $F(7, 221) = 0.84, p = 0.56, R^2 = 0.03$ .

According to Hypothesis 3, willingness to conduct a psychological evaluation of a patient requesting MAID will be associated with higher support for MAID and higher confidence in ability to conduct such an evaluation. Indeed, respondents who were willing to conduct a



Table 11

*Multiple Linear Regression of Demographic Characteristics on Support for MAID*

	B	SE(B)	$\beta$	<i>t</i>	<i>p</i>
Age	.010	.005	.126	1.954	.052
Race/Ethnicity	-.320	.183	-.104	-1.751	.081
Gender	-.111	.152	-.046	-.725	.469
Religiosity	-.055	.011	-.334	-5.244	.000
Political Orientation	-.108	.043	-.158	-2.500	.013

*Note.* Overall model:  $F(5,236) = 10.78, p < .001, R^2 = 0.19$ .

psychological evaluation for a patient requesting MAID had significantly higher levels of support for MAID ( $M = 4.39, SD = 0.80$ ) compared to participants who would refuse to perform such an evaluation ( $M = 3.90, SD = 1.27, t(244) = 3.68, p < 0.001$ ). This difference was even greater when the 84 individuals who replied that they would refuse to perform the evaluation simply because it was outside of their practice area (i.e., they were not ethically opposed to MAID) were excluded from the sample of refusers, which dropped the mean to 2.04 ( $SD = 1.02, t(160) = 12.93, p < .001$ ). Furthermore, participants who were willing to conduct a psychological evaluation for a patient requesting MAID showed significantly higher confidence in their ability to assess whether a psychological disorder was impairing judgement, when compared to participants who would refuse to perform the evaluation. This was true both in the context of a single evaluation ( $M = 3.36, SD = 1.00; M = 2.19, SD = 0.99; t(246) = 9.18, p < 0.001$ ) and in the context of a long-term relationship with the patient ( $M = 4.27, SD = 0.87; M = 3.71, SD = 1.02; t(246) = 4.65, p < .001$ ).

## **Chapter 4: Discussion**

The present study is the first to document attitudes toward medical aid in dying (MAID) in a national sample of licensed psychologists. Overall, support for MAID was high, and a significant majority of respondents favored the legalization of MAID. Consistent with previous research, attitudes toward MAID were more positive among left/liberal participants and relatively less positive among more religious respondents. No other sociodemographic characteristics were significantly associated with attitudes. Participants exhibited high factual knowledge of current U.S. MAID laws, but with some variability among respondents and among specific facts. Physical pain was seen as the most legitimate reason to request MAID, whereas concern about the financial cost of remaining alive and fear of being a burden to others were seen as relatively less legitimate. Only about half of the clinicians said they would be willing to perform a psychological evaluation for a patient requesting MAID, with refusers primarily citing that such an evaluation would be outside of their practice area. Findings from the current study indicate the need for specialty training and consultation for psychologists working with individuals with terminal illness requesting MAID.

### **4.1 Support for MAID and Associated Factors**

Findings from this study are somewhat consistent with previous research on factors related to approval of MAID. Although previous studies in non-psychologist samples have found higher rates of approval for what was then termed assisted-suicide and euthanasia among men compared to women (Cicirelli, 1997; Duffy, 2006; Koenig et al., 1996; Ryyanen et al., 2002; Yun et al., 2011), in the current study approval rates were comparable, a result found in other

studies with mental health professionals (DiPasquale & Gluck, 2001; Fenn & Ganzini, 1999; Ganzini, et al., 1996; Ganzini et al., 2000).

The current sample showed no significant association between support for MAID and age. The significantly higher approval rate of doctor-assisted suicide (the term used by Gallup) found among the 18 – 34-year-olds of the general public is an age bracket that was largely not covered in the current sample, given the six to seven years of post-graduate training it takes to become a licensed psychologist (the inclusion criteria to participate in this study) (Dugan, 2015). Indeed, the youngest participant in the current sample was 28 years old, and less than 23% of the sample was between the ages of 28 and 34. Therefore, a potential explanation for the lack of an association found between younger age and support for MAID in the current sample is that the current sample does not capture the youngest age bracket that appears to be the most supportive of MAID.

With regard to race/ethnicity, the nonsignificant finding could be due to the small size of non-White participants, although the percentage of non-White participants in the current study is quite close to the 16% of non-White psychologists nationwide (American Psychological Association Center for Workforce Studies, 2018). Other authors have argued that previous findings of low support among racial/ethnic groups (e.g., African Americans) are better accounted for by religiosity than race/ethnicity alone (Espino et al., 2010; Lichtenstein et al., 1997; Mouton, 2000). Indeed, when compared to other racial/ethnic groups (Whites, Asians, Latinos), Black Americans attend religious services more frequently, are more likely to endorse belief in God, and report higher ratings of the importance of religion in one's life (Pew Research Center, 2019). It may be that previous findings of racial/ethnic differences in level of support for MAID are better accounted for by religiosity.

There was no association between support for MAID and knowledge about MAID, living in a MAID-legal state, personal experience with caregiving, or professional experience with terminally ill patients. Instead, support for MAID was most robustly associated with lower religiosity and left-leaning political ideology, results that are consistent with a large body of previous research (DiPasquale & Gluck, 2001; Dugan, 2015; Fenn & Ganzini, 2000; Ganzini et al., 1996; Ganzini et al., 2000; Johnson et al., 2015; Wood & McCarthy, 2017).

The 90% of the current sample who believes MAID should be permitted at least under certain circumstances is slightly higher than the 85% of Oregon psychologists surveyed 20 years ago (Fenn & Ganzini, 1999). These levels of support are markedly higher than 68% of Oregon psychiatrists (Ganzini et al., 1996), 66% of a national sample of forensic psychiatrists (Ganzini et al., 2000), and 75% of New Mexico psychologists and psychiatrists (DiPasquale & Gluck, 2001) who thought that PAS should be permitted at least under some circumstances. Potential explanations for the higher level of support among the current sample include terminology used (all previous studies used the phrase “assisted suicide” or “physician-assisted suicide”), sample characteristics (psychiatrists vs. psychologists, single state clinicians vs. multi-state sample), and growing social acceptability of MAID with the passage of time. Support for what national surveys refer to as doctor-assisted suicide and euthanasia has steadily increased (Brenan, 2018), which may be aided by the fact that 20 years of an active MAID law in Oregon has revealed no evidence of misuse or abuse of the law (Nelson, 2016).

The current study also explored nuances in psychologists’ attitudes about hastened death, finding results largely consistent with studies of other mental health professionals. As in previous surveys (Fenn & Ganzini, 1999; Ganzini et al., 1996), MAID is seen as a less acceptable way of hastening death than prescribing pain medications in doses that may hasten death, withdrawing

artificially delivered food and hydration, or stopping life-sustaining medical treatment. However, the proportion of mental health professionals who believe that prescriptions to end life should *never* be permitted has steadily decreased from 32% in 1996 (Ganzini et al.) to 15% in 1999 (Fenn & Ganzini) to just 10% of the current sample. This finding is further evidence for an increasing acceptability of MAID among mental health professionals, similar to members of the general public (Brenan, 2018; Dugan, 2015; Wood & McCarthy, 2017). Potentially in response to this increase in acceptance, a number of professional organizations (e.g., The American Medical Association, the American Psychological Association) have recently assembled working groups or called upon their ethics council to re-examine their stance on MAID (Span, 2017). No empirical studies to date have longitudinally tracked physician attitudes toward MAID over time; it is unknown whether physicians are showing a similar increase in favorability toward MAID.

When considering respondents' perception of different reasons that patients might request MAID, the current study was the first to use verbatim items from state-sanctioned reporting forms that prescribing physicians must submit to document the reasons a patient has requested MAID (although some studies have used similarly worded items). In this and previous research, respondents view pain as the most legitimate reason for requesting MAID, while patient concern over burdensomeness to others is seen as the least legitimate reason for requesting MAID (Fenn & Ganzini, 1999; Ganzini, et al., 1996). These distinctions in perceptions of legitimacy may be driven by the extent to which psychologists see possibilities to address patient concerns. In some patients, pain may be intractable – or at least psychologists may believe that is true – and psychologists appear willing to support requests for MAID to help patients avoid suffering. On the other hand, support is less universal when MAID requests are driven by fears of burdensomeness, a kind of attitude among patients that may or may not be accurate, and the kind

of attitude that psychologists may believe can be successfully addressed in psychotherapy, based on their experience with other types of patients. Psychologists' attitudes about what makes MAID more or less legitimate are important because they could influence not only their willingness to be involved with patients requesting MAID but also their conclusion whether a patient has capacity to receive MAID. Although physical pain is consistently viewed as the most legitimate reason to have access to MAID, physician reporting forms and surveys with patients have revealed that physical pain is least commonly cited by patients, and psychological factors, such as fear of losing autonomy or wanting a sense of control, are more common (Ganzini, Goy, & Dobscha, 2009; Oregon Health Authority, 2018; Washington State Department of Health, 2017). The relatively low perceived legitimacy among psychologists of patient concerns over the financial cost of treating or prolonging their terminal condition, in contrast to the concerns about "financial toxicity" expressed by patients, highlights another area of disjunction (Zafar & Abernethy, 2013). There appears to be a disconnect between what clinicians see are legitimate reasons to request MAID and what patients experience.

## **4.2 Attitudes about Conducting MAID Mental Health**

### **Evaluations**

As MAID becomes legal in more states, an increasing number of psychologists are called upon to conduct mental health evaluations when treating physicians are concerned about the judgment of patients requesting MAID. In the current sample, 56% of psychologists said they would agree to perform the psychological evaluation of a patient requesting MAID and feel competent to do so, a proportion similar to previous studies (50% of Oregon psychiatrists, Ganzini et al., 1996; 60% of Oregon psychologists, Fenn & Ganzini, 1999; and 60% of New

Mexico psychologists and psychiatrists, DiPasquale & Gluck, 2001). A significant percentage (34%), however, believe MAID is acceptable but do not feel prepared to conduct this kind of evaluation. Although capacity evaluations fall within psychologists' scope of practice, the clinicians in this study may realize that evaluating a patient requesting a life-ending medication involves a novel set of ethical and clinical complexities beyond their current expertise.

Indeed, examining what psychologists know about MAID reveals substantial knowledge overall, but with pockets of misinformation. For instance, the majority of psychologists believe that psychological evaluations are mandatory for all patients requesting MAID, although evaluations are only required if a physician has concerns about a patient's judgment. Likewise, nearly half think family members or other people are allowed to administer the lethal medication if the patient is not able, which is not true. Although any individual psychologist is not mandated to perform a psychological evaluation for MAID when asked, those who agree to conduct these evaluations need comprehensive training to ensure their knowledge about clinical practice and legal requirements. Some state psychological associations have created practice guidelines for psychologists (e.g., California Psychological Association, 2017) to address these training needs.

### **4.3 Limitations**

Like all research, the current study has a number of limitations. The external validity of the findings relies on the assumption that the sample is representative of the population at large – in this case, licensed psychologists in the United States. It is possible only individuals with strong or polarized views on this matter (strongly in favor of or strongly against MAID) participated in the survey. This risk was mitigated by describing the study as a survey on “end of life options” instead of medical aid in dying. Additionally, although the current sample was highly liberal, it is unclear whether this is a sample bias or simply representative of psychologists



at large. Though the American Psychological Association's Center for Workforce Studies collects demographic data on licensed psychologists in the U.S., no questions on political orientation, religion, or end-of-life training have been included (American Psychological Association, 2018), a limitation to understanding the generalizability of the current sample. Separate surveys have found that only 8% of U.S. psychology professors identify as conservative (Duarte et al., 2015), and among social and personality psychologists specifically, only 6% describe themselves as conservative (Inbar & Lammers, 2012). Another indication that the sample may not be representative is that more than two thirds had formal training in psycho-oncology, hospice, or palliative care. However, it is likely that psychological evaluation of patients requesting MAID will fall precisely to this group of psychologists, and this study thus reflects the attitudes and knowledge of the mental health providers for whom this practice issue is most relevant.

A second limitation involves potential imprecision of measurement. Although the response options for the main outcome measure of support for MAID were expanded (from three categories used in the Ganzini studies to five points), it is possible that even more variability could have been captured. Furthermore, given the lack of research in this area, the MAID knowledge scale was created for the present study, and as such, its psychometric properties have not been established. Nor is there systematic information about the scales adapted from previous studies, an issue that plagues most of the research in this area. Finally, throughout the history of research on this topic, labels have evolved and item wording has fluctuated from study to study, all making generalizations from one study to the next difficult. To move forward, this area of research would benefit from more rigorous and consistent measurement approaches to facilitate cross-study comparisons.

Another limitation is the potential risk of Type I errors due to the number of statistical tests run. However, overall there was a small number of statistical tests that were significant, multiple comparisons were corrected for, and results remained stable.

## **4.4 Directions for Future Research**

Future research could begin with simple reporting at the state level of how many patients who request MAID are referred for psychological evaluation but then denied MAID due to the results of their psychological evaluation. State reporting forms document the number of MAID recipients who were referred for psychological evaluation, but given that states only report information on patients for whom a prescription was eventually written, these data only represent patients who successfully navigate the process and go on to receive MAID. We currently do not know the number of patients who request MAID but do not receive MAID. That can occur for a range of reasons, including failure of confirmation of disease and prognosis by a second consulting physician, patients who change their mind, patients who die within the two-week required waiting period between the first and second request, and, of course, failing the mental health evaluation. Without such data, we do not know the number of patients who are interested in MAID but denied access to it, and for what reasons. Such research would provide richer insight into the pipeline of potential MAID recipients and the different pathways of such patients on their quest to obtain access to MAID.

Although the proportion of patients with terminal illness who request MAID is small, and the proportion who require a mental health evaluation is even smaller, psychologists and other mental health professionals are conducting these evaluations now. Data could be gathered to examine the range of methods and measurements used in these evaluations, as well as the characteristics of patients approved and denied. Likewise, more needs to be known about the role

of physicians in this process, as they are the initial gatekeepers who judge whether a mental health evaluation is warranted. Virtually nothing is known about how they make that determination. Indeed, the questions used in the current study are relevant to all health care professionals affected by MAID legislation, including pharmacists, nurses, social workers, and chaplains. Future studies could include targeted recruitment of individuals with stronger religiosity and more conservative political views, which may yield different results. Additionally, future studies could include a personality measure to examine whether there is a relationship between personality traits and attitudes toward MAID.

## **4.5 Implications for Training and Practice**

The significant associations found in this study between religiosity, political ideation, and attitudes toward MAID highlight the potential impact of personal values on professional practice. The present study is not the first to find a relationship between underlying beliefs and professional behavior with regard to MAID (DiPasquale & Gluck, 2001) and the influence of personal beliefs on capacity determinations for patients requesting MAID (Johnson et al., 2015). This important question remains: which clinicians should be opting *out* of these evaluations? Certainly, psychologists who are ethically opposed to the practice should decline to perform the evaluation. The Vermont Department of Health states that although participation in MAID by any health care professional is voluntary, physicians who choose not to participate due to religious or philosophical objection “must either inform the patient about the Act 39 option directly, or make a referral or otherwise ensure that the patient is able to obtain and understand relevant and accurate information about the aid-in-dying process” (Vermont Department of Health, 2019). A similar standard could be established for mental health professionals. At the same time, psychologists who are highly supportive of MAID could also be biased, with a lower

threshold for approving patients to receive MAID. Indeed, Johnson et al. (2015) found that when presented with vignettes of patients requesting MAID, psychologists' determination of competence was significantly associated with their willingness to support one of their own family member's choice of PAS, indicating that a high level of approval could unintentionally lower the competence threshold.

A significant proportion of psychologists, including those in states where MAID is legal, support the policy but nonetheless feel unprepared to conduct MAID evaluations, signaling the need for additional training. Some state psychological associations have organized working groups to produce written guidelines for psychologists conducting MAID mental health evaluations (e.g., California Psychological Association, 2017), and one forthcoming clinical handbook chapter provides a framework for conducting evaluations (Carpenter & Merz, in press). Psychologists who are already trained to conduct capacity evaluations may be ideal practitioners for training on the additional nuances of evaluations for patients with serious illness.

## **4.6 Conclusion**

The majority of licensed psychologists, like the majority of the general public, support MAID laws in the U.S. Over half believe that professional organizations representing psychologists should make official position statements in support of MAID. Many psychologists, although they support MAID, feel unprepared to conduct mental health evaluations for patients requesting MAID, suggesting the need for additional training. That training presumes, however, we know all we need to about patients who request a lethal prescription – their motivations, how those motivations might be influenced by circumstances and other people, and how a variety of

psychological factors affect their choice. MAID presents mental health providers with a high-stakes clinical issue that deserves more attention in research and practice.

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# Appendix

## Full Questionnaire Administered to Study Participants Online via Qualtrics

### INCLUSION CRITERIA

1. Are you a licensed psychologist?

- Yes → next question
- No → end of survey

### SOCIODEMOGRAPHIC INFORMATION

2. What state are you licensed in? (If you are licensed in more than one state, check the state in which you see the majority of your clients/patients)

*(Dropdown list of all 50 states)*

3. Age: \_\_\_\_\_

4. Gender:

- Female
- Male
- Transgender
- Other: \_\_\_\_\_

5. Race/ethnicity (check all that apply):

- Asian
- Black/African American
- Caucasian/White
- Hispanic
- Native American
- Native Hawaiian/Pacific Islander
- Other: \_\_\_\_\_

6. Education:

- Ph.D.
- Psy.D.
- Ed.D.
- Other: \_\_\_\_\_

7. Religious affiliation:

- Agnostic
- Atheist
- Buddhist
- Catholic
- Hindu
- Jewish
- Muslim
- Protestant
- None
- Other (please specify): \_\_\_\_\_

## CLINICAL PRACTICE INFORMATION

Please answer the following questions regarding your current clinical practice.

8. Approximately how many clients/patients you see PER WEEK? \_\_\_\_\_

9. What is your practice setting (please check all that apply):

- Assisted Living
- Community Mental Health or Public Setting
- Health Maintenance Organization (HMO)
- Home-Based
- Jail or Prison
- Medical Inpatient Consultation
- Nursing Home
- School (up through grade 12)
- Private Practice
- Psychiatric Inpatient
- University or College
- Other (please specify: \_\_\_\_\_)

10. How many YEARS have you been in practice as a licensed psychologist? \_\_\_\_\_

11. Please estimate the number of clients/patients in your **current** practice with a terminal illness, expected to live less than six months: \_\_\_\_\_

12. Please estimate the number of your clients/patients who have **died** from a terminal illness in the past year: \_\_\_\_\_

13. Do you have any formal training (e.g., coursework, clinical practicum, internship rotation, postdoctoral fellowship, post-licensure training, etc.) in working with individuals with serious, life-threatening, or terminal illness, or end-of-life...such as psycho-oncology, palliative care, hospice, etc.?

- Yes
- No

## PERSONAL EXPERIENCE

14. Have you ever had a PERSONAL caregiving role for a family member or friend (or other loved one) who had a terminal illness?

- Not involved in care
- Helped arrange care
- Assisted in care
- Primary caregiver

15. Have you ever had PERSONAL experience with a family member or friend who experienced significant *pain and/or suffering* while dying?

- Yes
- No

## ATTITUDES TOWARD HASTENED DEATH

Please answer the following questions regarding your personal views on end-of-life options.

16. If requested by a competent, terminally-ill patient, do you believe a physician should be permitted to do the following...

Withhold (not start) life-sustaining medical treatment, which may hasten death	Never	Under RARE circumstances	Under SOME circumstances	Under MOST circumstances	Always
Stop life-sustaining medical treatment, which may hasten death	Never	Under RARE circumstances	Under SOME circumstances	Under MOST circumstances	Always
Withdraw artificially-delivered food and hydration, which may hasten death	Never	Under RARE circumstances	Under SOME circumstances	Under MOST circumstances	Always
Prescribe analgesics such as morphine to relieve pain in dosages which may hasten death	Never	Under RARE circumstances	Under SOME circumstances	Under MOST circumstances	Always
Write a prescription for medication whose sole purpose would be to allow the patient to end his or her life	Never	Under RARE circumstances	Under SOME circumstances	Under MOST circumstances	Always

## KNOWLEDGE OF FACTS ABOUT MEDICAL AID IN DYING

Medical aid in dying is a practice by which a patient can end his/her own life by taking a lethal medication provided by his/her physician.

Please answer the following 10 True or False questions regarding facts about this practice. Correct answer will be provided on the following pages.

(The correct answer popped up *after* they answered each question.)

1. Medical aid in dying is currently legal in some U.S. states.

- True
- False
- Don't Know

**True:** Medical aid in dying is currently legal in 7 U.S. states/territories (as of January 2018): Oregon, Washington, Vermont, California, Colorado, Washington D.C., and Montana.

2. You must be at least 18 years old to receive medical aid in dying in the U.S.

- True
- False
- Don't Know

**True:** In all U.S. states where it is legal, individuals must be at least 18 years old to receive medical aid in dying.

3. It is not necessary to be diagnosed with a terminal illness to receive medical aid in dying.

- True
- False
- Don't Know

**False:** It is required to be diagnosed with a terminal illness to receive medical aid in dying. The terminal diagnosis must be confirmed by two independent physicians.

4. Individuals must have less than 6 months estimated to live in order to receive medical aid in dying.

- True
- False
- Don't Know

**True:** Individuals must have less than 6 months estimated to live, in order to receive medical aid in dying. This estimation must also be confirmed by two independent physicians.

5. Individuals wishing to receive medical aid in dying must make two requests, with a waiting period of at least 15 days in between the first and second request.

- True
- False
- Don't Know

**True:** Individuals wishing to receive medical aid in dying must make two requests, with a waiting period of at least 15 days in between the first and second request.

6. If a patient is unable to self-administer the medication (swallow it by themselves), they are allowed to receive help from a family member or the medical team.

- True
- False
- Don't Know

**False:** The patient must be able to self-administer the medication by themselves, without help from any other person.

7. All patients who request medical aid in dying are required to undergo a psychological evaluation by a mental health professional.

- True
- False
- Don't Know

**False:** No formal evaluation is automatically required, but all laws require that the patient be capable or competent (able to make their own medical decisions). If there is doubt about this, a psychological evaluation is required.

8. If a patient is suffering from a psychological disorder that is impairing their judgment, they are not eligible to receive medical aid in dying.

- True
- False
- Don't Know

**True:** In order to be eligible for medical aid in dying, patients cannot be suffering from a psychological disorder that is impairing their judgment.

9. Once an individual makes a request for medical aid in dying, they can change their mind at any time.

- True
- False
- Don't Know

**True:** The individual can rescind (withdraw) their request for medical aid in dying at any time. If they have already received the medication, they are free to decide not to take it.

10. Physicians and other health care professionals are required by law to participate in medical aid in dying in states where it is legal.

- True
- False
- Don't Know

**False:** No health care professional is required to participate in medical aid in dying. Participation is completely voluntary.

#### ATTITUDES TOWARD MAID

Summary: In the U.S., medical aid in dying is practice by which an individual who is at least 18 years old, has capacity to make their own medical decisions, diagnosed with a terminal illness, and estimated to have less than six months to live, can request and receive a medication from their physician which they can voluntarily self-administer (swallow) *with the intention of ending their life*.

Do you think medical aid in dying should be <b>legal</b> ?	NO	Under some circumstances	YES
Do you think medical aid in dying is <b>ethical</b> ?	NO	Under some circumstances	YES
Do <b>you</b> want to have medical aid in dying as an end-of-life option available to you?	NO	Under some circumstances	YES



## FACTORS CONTRIBUTING TO REQUESTS FOR MAID

In most states where medical aid in dying is legal, physicians who write a medical aid in dying prescription are required by law to document the reasons why the patient requested it. Such reasons are listed below.

For the following 7 items, please rate your opinions on whether the following factors are **legitimate** reasons for requesting medical aid in dying.

I believe that the following patient concerns are **legitimate** reasons to request medical aid in dying...

The patient's concern about the <b>financial cost</b> of treating or prolonging his or her terminal condition.	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
The patient's concern about the <b>physical or emotional burden</b> on his or her family, friends, or caregivers.	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
The patient's concern about his or her condition representing a steady <b>loss of autonomy</b> .	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
The patient's concern about his or her decreasing ability to participate in <b>activities that made life enjoyable</b> .	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
The patient's concern about his or her <b>loss of control of bodily functions</b> , such as incontinence and vomiting.	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
The patient's concern about <b>inadequate pain control</b> at the end of life.	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
The patient's concern about a <b>loss of dignity</b> .	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree

## PSYCHOLOGICAL EVALUATION OF PATIENTS REQUESTING MAID

To determine decision-making capacity in patients requesting medical aid in dying, licensed psychologists are sometimes consulted to determine that the patient “is not suffering from a psychiatric or psychological disorder, or depression causing impaired judgment.”

Assume that you were asked to perform a psychological evaluation of a patient requesting medical aid in dying.

Please think about whether you are ethically comfortable with participating in such an evaluation, as well as whether you see this type of evaluation as within your clinical practice area – whether you feel professionally competent to complete such an evaluation.

Again, your task is to determine whether that the patient “is not suffering from a psychiatric or psychological disorder, or depression causing impaired judgment.”

Which of the following best describes how you would respond?

- I would agree to perform the evaluation: it is inside my practice area and I am not ethically opposed to it.
- I would refuse to perform the evaluation because I am ethically opposed to it AND it is outside of my practice area.
- I would refuse to perform the evaluation simply because it is outside of my practice area (I am not ethically opposed to it).
- I would refuse to perform the evaluation simply because I am ethically opposed to it (it is within my practice area).

Please rate how **confident** you would be in your ability to conduct such a psychological evaluation.

How confident are you that *within the context of a single evaluation* you could adequately assess whether or not a psychological disorder was impairing the judgment of a patient who was requesting medical aid in dying?

1=Not at all confident	2	3=Somewhat confident	4	5=Very confident
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How confident are you that *given a long-term relationship with a patient* you could adequately assess whether or not a psychological disorder was impairing the judgment of a patient who was requesting medical aid in dying?

1=Not at all confident	2	3=Somewhat confident	4	5=Very confident
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## VIEWS ON MAID LAWS

1. What is your position with regard to medical aid in dying laws being enacted in the U.S.?

Strongly oppose	Oppose	Neither oppose nor favor	Favor	Strongly favor
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2. What do you think the official public position of organizations representing psychologists should be with regard to medical aid in dying?

- No position
- Against medical aid in dying
- For medical aid in dying

3. Some people have raised concerns that psychologists' participation in the process of medical aid in dying could adversely affect public perception of the profession. Do you believe that medical aid in dying laws constitute a threat to the profession of psychology?

- Yes
- No

Please rate the extent to which you agree or disagree with the following statements:

The safeguards contained in the current U.S. medical aid in dying laws are adequate.	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
Medical aid in dying laws should contain a requirement that the family be informed of the patient's intent to end his or her life.	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
The two-week waiting period specified by current medical aid in dying laws is adequate to prevent transitory desire to end life.	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree

## RELIGIOSITY AND POLITICAL ORIENTATION

Please answer the following questions about your **faith**.

How often do you attend church, synagogue, or other religious meetings?	Never	Once a year or less	A few times a year	A few times a month	Once a week	More than once a week
How often do you spend time in private religious activities, such as prayer, religious meditation, or bible study?	Rarely or Never	Once a month or less	Once a week	A few times a week	Once a day	More than once a day
In my life, I experience the presence of the Divine.	Definitely not true	Somewhat not true	Neutral	Somewhat true	Definitely true	
My religious beliefs are what really lie behind my whole approach to life.	Definitely not true	Somewhat not true	Neutral	Somewhat true	Definitely true	
I try hard to carry my religion over into other dealings in life.	Definitely not true	Somewhat not true	Neutral	Somewhat true	Definitely true	

Please rate where you stand with regard to your **political** attitudes.

1 = Very Left/Liberal	2	3	4	5	6	7	8	9	10= Very Right/Conservative
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Optional raffle participation: If you would like to be included in the raffle, click on the following link to enter your email in a *\*separate\** form that is not linked to this survey:

*(link provided here)*