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Do Ethical Judgments Depend on the Type of Response Scale? Comparing Acceptability versus Unacceptability Judgments in the Case of Life-Ending Procedures

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Using Functional Measurement (Anderson, 2008), Frileux, Lelièvre, Muñoz Sastre, Mullet, and Sorum (2003) examined the joint impact of several key factors on lay people's judgments of the acceptability of physicians' interventions to end patients' lives. The level of acceptability was high, and the information integration rule that best described the participants' judgments was Acceptability = Patient's Request + Patient's Age + Residual Suffering + Incurability. Critics suggested, however, that acceptability was high because the ethical problem was framed in terms of acceptability (Murphy, 2007). Presenting participants with acceptability scales may have caused the life-ending procedure to be represented in participants' mind as basically "acceptable". By contrast, presenting participants with unacceptability scales might cause the procedure to be represented as basically "unacceptable". In the present study, therefore, we directly compared lay people's judgments of the acceptability of life-ending procedures under two opposite conditions – an acceptability condition, and an unacceptability condition. The life-ending procedure did not appear as more acceptable to participants responding in terms of acceptability than to those responding in terms of unacceptability. In addition, the impacts of the factors describing the end-of-life situations were not affected by the type of judgment scale that was used. Functional Measurement seems to be resistant to goal-framing effects; the findings that have been observed using acceptability scales can be considered as robust.

Ethics requires judgments. A given behavior is not in itself ethical or unethical. It can, however, be judged as conforming or not conforming to ethics. Yet this judgment of conformity is apt to vary over time and culture,

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and according to the particular person. In addition, problems of ethics arise most often in situations that can be considered as complex, indeed as emotionally charged, in situations in which certain elements point in one direction and other elements in the opposite direction. In other words, multiple factors are most often in play, and they are likely to contribute in a complex way to the final judgment relating to conformity with ethics (Berlinguer, 2003; Kleespies, 2004; Palmer, 2005).

It is, therefore, not surprising that a theory of judgment like the Functional Theory of Cognition—the intention of which is to study principally the rules of judgment, i.e., the manner in which persons take into account numerous elements of information of all types and combine them mentally to arrive at a global judgment—has been applied to the domain of ethical judgment. Let us be clear that the Functional Theory of Cognition is neutral with respect to the multiple stakes and ethical stands (Anderson, 2008). It offers simply a methodological framework—functional measurement—ready to be implemented to respond to questions posed by experimenters, and/or by professionals, and/or by the public. The Functional Theory of Cognition does not, by itself, bring a response to the question of whether a certain medical procedure, for example, is acceptable or not. Functional measurement has, however, been shown to provide data that have ecological validity (Fruchart, Rulence-Pâques & Mullet, 2007; Levin, Louviere, Schepanski & Norman, 1983).

END OF LIFE DECISIONS

Dying has become a problem (Kastenbaum, 2000). Recent technological advances have transformed the act of dying by making it possible not only to alleviate pain but also to extend life. The resulting possibility of being maintained on life support for months, and in some cases for years, has engendered anxiety among elderly and non-elderly patients. Accordingly, patients and their families are more and more willing to take part in the medical decisions at the end of life (Weir, 1997). They, their physicians, the public, and policy makers have recently had to face several difficult questions. Should a terminally-ill patient be allowed to die? Should the medical profession have the option of helping such a patient to die?

The two most controversial end-of-life decisions are those in which physicians actively help patients to die, by means of either physician-assisted suicide or euthanasia. In physician-assisted suicide, the physician provides the patient with the means to end his or her own life. In euthanasia, the physician deliberately and directly intervenes to end the patient's life;

this is sometimes called "active euthanasia" to distinguish it from withholding or withdrawing treatment needed to sustain life.

Legislation been passed recently to permit and regulate euthanasia and PAS in the Netherlands and Switzerland, euthanasia in Belgium, and PAS in the state of Oregon (Cohen Almagor, 2002; Mendelson, 2003, see also Rosenfeld, 2004). Such legislation is increasingly under discussion in other U.S. states and in other countries. It is important, therefore, for policy makers and caregivers around the world to appreciate under which conditions life-ending actions are and are not acceptable both to the public and to the health care community.

Using Functional Measurement (Anderson, 2008), Frileux, Lelièvre, Muñoz Sastre, Mullet, and Sorum (2003) examined the joint impact of several key factors on lay people's judgments of the acceptability of physicians' interventions to end patients' lives. They presented their participant with scenarios describing concrete situations depicting the condition of a terminally-ill patient. In line with other studies (e.g., Cuperus-Bosma, van der Wal, Looman & van der Maas, 1999), their participants' judgments of the acceptability of physician-assisted suicide or euthanasia depended additively on four factors: the age of the patient, the degree of incurability of the patient's illness, the level of the patient's suffering in spite of treatment, and, most importantly, the extent to which the patient requested the life-ending procedure. When the patient had not requested a life-ending procedure, the level of acceptability was slightly higher when the patient was mentally impaired than when in good mental condition. The information integration rule that best rendered the participants' judgments was Acceptability = Patient's Request + Patient's Age + Residual Suffering + Incurability.

Subsequent studies have shown (Guedj, Gibert, Maudet, Muñoz Sastre, Mullet & Sorum, 2005) that acceptability for the lay people of a physician's intervention to end a patient's life was not restricted to situations of physical pain. Acceptability was also high in cases of complete dependence without physical pain and in cases of severe psychiatric disease. Finally, they demonstrated that the additive schema of information integration evidenced in the studies conducted on lay persons also applied to health professionals, physicians and nurses (Teisseyre, Mullet & Sorum, 2005).

The Present Study

These studies have been criticized on the ground that the judgment scale that was proposed to participants was an acceptability scale (Murphy, 2007). Critics argued that in the context of decision making about medical procedures that are prohibited by law; that is, that are unacceptable in

principle, unacceptability scales should have been used. They suggested that the high level of acceptability registered in all previous studies could have been due to the fact that the whole ethical problem with which the participants were presented was framed in terms of acceptability.

As framing effects have been demonstrated in many studies involving human judgment (for a recent review, see Maule & Villejoubert, 2008), these critics are to be taken seriously. As a result, we decided to compare lay people's judgments of the acceptability of life-ending procedures observed under two opposite conditions: a condition in which these judgments were made in terms of acceptability, as in previous studies, and a condition in which they were made in terms of unacceptability. Based on the findings reviewed by Maule and Villejoubert (2008; see also Plous, 1993; Kühberger, 1998), we expected a life-ending procedure to be more acceptable to participants presented with acceptability scales than to those presented with unacceptability scales; that is, we expected to observe what as been termed a goal-framing effect by Levin, Schneider and Gaeth (1998). Presenting the participants with acceptability scales should lead to the life-ending procedure being represented in participants' mind as basically "acceptable". By contrast, presenting the participants with unacceptability scales should lead to the life-ending procedure being represented as basically "unacceptable".

On the basis of the previous studies (e.g., Frileux et al., 2003), we expected that three of the factors describing the end-of-life situations – level of incurability of the illness, patient's age, and request – would have significant effects on the judgments of acceptability. Based on Guedj et al.'s (2005) findings, we expected that the fourth factor – type of suffering – would have no effect or only a very small effect on the judgments. We also expected to find interactions between the type of scale and the other factors. In other words, we expected that the impacts of the factors describing the situation would be affected by the type of judgment scale that was presented. We were, however, unable to specify the way these impacts should be affected.

METHOD

Participants. The participants were unpaid volunteers. They were recruited and tested by two research assistants who were psychology students trained in the techniques of functional measurement. Each research assistant contacted 100 people walking along city sidewalks, explained the study, asked them to participate, and, if they agreed, arranged where and when to administer the experiment. Of these 200, 113 (57%) participated:

59 were females and 54 were males. Their mean age was 38 years (SD = 16.09, range = 18-81).

Material. The material consisted of 36 cards containing a story of a few lines, a question, and a response scale. The stories were composed according to a four within-subject factor design: Type of suffering x Incurability x Request x Age, 2 x 2 x 3 x 3. The quality of care (the best available) was held constant. Each story contained these four information items in the following order: (a) the patient's age (35, 60, or 85 years), (b) the level of incurability (or curability) of the illness (completely incurable versus extremely difficult to cure), (c) the type of the suffering (extreme physical pain or complete dependence), and (d) the extent to which the patient requests the life-ending procedure (no request, some form of request, repeated formal requests). All patients were identified as "Mrs." The only additional information was "She is currently receiving the best possible treatment."

Under each story were a question and a response scale. For 54 participants, the question was, "Do you believe that physician-assisted suicide would be an acceptable procedure in this case?" For the remaining 59 participants, the question was, "Do you believe that physician-assisted suicide would be an unacceptable procedure in this case?" The response scale was a 15-point scale with a left-hand anchor of "Not acceptable at all" or "Not unacceptable at all" and a right-hand anchor of "Completely acceptable" or "Completely unacceptable", depending on the condition. Two examples are given in the Appendix. The cards were arranged by chance and in a different order for each participant.

Procedure. The site was a vacant classroom in the university or the private home of the participant. Each person was tested individually by one of the psychology students trained in Anderson's methods. The session had two phases. In the familiarization phase, the experimenter explained to each participant what was expected, i.e., that he or she was to read a certain number of stories in which a person is suffering from an illness that is incurable or extremely difficult to treat and requests or does not request the right to die, and that in each case the participant was to indicate the degree of acceptability of a decision to end the person's life. Next, each participant was presented with 18 stories taken from the complete set. The participant read each story out loud, after which the experimenter reminded him or her of the items of information the story contained. The participant then provided the requested acceptability rating. After completing the 18 ratings, the participant was allowed to compare responses and change them. In the

experimental phase, the whole set of 36 stories was presented. Each participant provided ratings at his or her own pace, but was no longer allowed to compare responses nor to go back and make changes as in the familiarization phase. In both phases, the experimenters routinely made certain that each participant, regardless of age or educational level, was able to grasp all the necessary information before making a rating.

The participants took 15-30 minutes to complete both phases. The experimental phase went quickly because they were already familiar with the task and the material. The participants knew in advance how long the experiment would last. None of them complained about the number of vignettes they were required to evaluate.

RESULTS

The data gathered under the unacceptability condition were transformed by simply reversing the values on the response scale; that is, they were transformed into acceptability data. The main findings are shown in Figure 1. In both panels, the sets of curves were approximately at the same level; that is, the scale factor had not much effect on the responses. In addition, in both panels, the patterns of data were roughly the same; that is, the scale factor did not interact with the within-subject factors. A cluster analysis was performed on the raw data. Three clusters were identified. They are shown in Figure 2. The first one (N = 117) was termed Always depending on circumstances because the participants in this cluster never judged acceptability in an all or none way. In each cases, they based their judgment on the information that was provided. There was no significant difference in the composition of this cluster as a function of the type of scale that was used. The second cluster (N = 2) was termed Never Acceptable, and the third one (N = 4) was termed Always Acceptable. These two clusters comprised of participants who always judged in an all or none way.

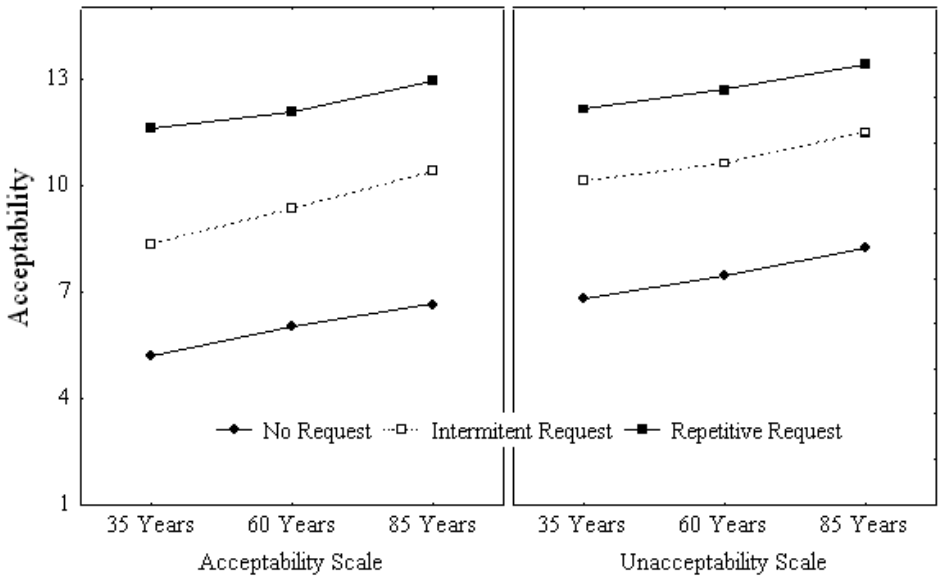

Figure 1. Effects of Type of Scale, Patient's Request and Patient's Age on Acceptability Judgments.

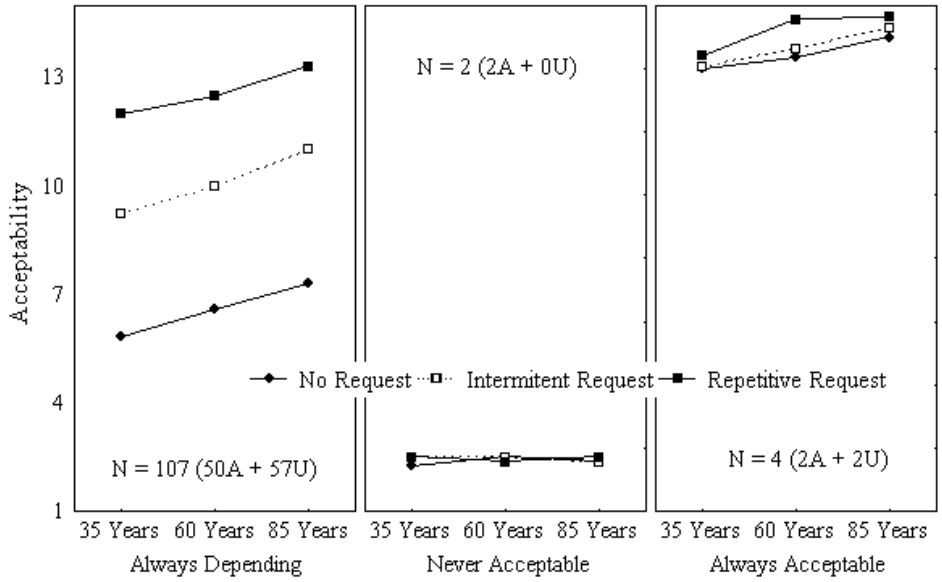

Figure 2. Results of a Cluster Analysis Performed on the Acceptability Data (A= Acceptability Scale, U = Unacceptability Scale).

The whole set of data was then analyzed, at the group level, by performing analysis of variance. The design of the analysis of variance was Scale (acceptability versus unacceptability) x Type of suffering x Incurability x Request x Age, 2 x 2 x 2 x 3 x 3. The effect of the Scale factor was not significant. The mean judgment was 9.17 in the acceptability condition as compared with 10.32 in the unacceptability condition, $\eta^2p=.04$. Three within-subjects factors (out of the four within-subjects factors considered in the study) had a significant effect. The older the patient (10.51 – 9.03 = 1.48 point between the oldest and the youngest), $F(2,222) = 54.42$, $p<.001$, $\eta^2p=.33$; the less curable the illness (9.99 – 9.50 = 0.48), $F(1,111) = 22.60$, $p<.001$, $\eta^2p=.17$; and the more repetitive the request (12.46 – 6.72 = 5.14 for repeated requests versus none), $F(2,222) = 165.84$, $p<.001$, $\eta^2p=.60$, the more acceptable did participants find physician-assisted suicide. The effect of the type of suffering factor was not significant. The mean judgment was 9.84 in the physician pain condition as compared with 9.64 in the complete dependence condition, $\eta^2p=.02$. No interaction was significant.

DISCUSSION

Lay people's judgments of the acceptability of life-ending procedures were elicited under two opposite conditions – an acceptability condition and an unacceptability condition. The first hypothesis was that a life-ending procedure would appear more acceptable to participants responding in terms of acceptability than to those responding in terms of unacceptability. The data did not support this hypothesis. In addition, the observed effect was in the opposite direction; that is, the mean acceptability judgment was higher in the unacceptability condition, once the date were transformed, than in the acceptability condition. This finding is consistent with Maule and Villejoubert's (2008) suggestion that framing effects are not automatically observed each time people are presented with two different, but normatively equivalent versions of the same material. The methodological framework that was used in the present study – functional measurement – seems to be resistant to goal-framing effects that could affect the observed mean judgments.

The second hypothesis was that the level of incurability of the illness, the patient's age, and the degree of patient request would have significant effects on the acceptability of ending life. The data supported this hypothesis. As in previous studies, patient request had the major effect, followed by patient's age (Frileux et al., 2003). The second hypothesis was also that the type of suffering would have no effect or only a very small effect on the judgments. The data supported this hypothesis. This non-effect is an important finding; it is the first independent replication of Guedj et

al.'s (2005) demonstration that lay people consider a life-ending procedure equally acceptable in a case of complete dependence and in a case of physical suffering, provided that the surrounding circumstances are the same (e.g., the same degree of patient request).

The third hypothesis was that the impact of the factors describing the situation would be affected by the type of judgment scale that was presented. The data did not support this hypothesis. No factor differed in its impact on the judgments of participants who used an acceptability scale versus on the judgments of those who used an unacceptability scale. In other words, the findings that have been observed to date using acceptability scales may be considered robust. Functional measurement seems also to be resistant to goal-framing effects that could affect the observed impact of each descriptive factor. The robustness of the findings probably apply to other study on ethics conducted in the methodological framework of the Functional Theory of Cognition (Esterle, Muñoz Sastre & Mullet, 2008; Frileux, Muñoz Sastre, Antonini, Mullet & Sorum, 2004; Guedj, Muñoz Sastre, Mullet & Sorum, 2006, 2009; Muñoz Sastre, Pecarisi, Legrain, Mullet & Sorum, 2007; Teisseyre, Duarte dos Reis, Mullet & Sorum, 2009).

REFERENCES

Anderson, N. H. (2008). *Unified social cognition.* New York: Psychology Press.

Berlinguer, G. (2003). *Everyday bioethics.* Amityville, NY : Baywood.

Cohen-Almagor, R. (2002). Why the Netherlands? *Journal of Law and Medical Ethics, 30,* 95-104.

Cuperus-Bosma, J. M., van der Wal, G., Looman, C. W. N., & van der Maas, P. J. (1999). Assessment of physician-assisted death by members of the public prosecution in the Netherlands. *Journal of Medical Ethics, 25,* 8-15.

Esterle, M., Muñoz Sastre, M. T., & Mullet, E. (2008). Judging the acceptability of sexual intercourse among persons with learning disabilities: French lay people's viewpoint. *Sexuality & Disability, 26,* 219-227.

Frileux, S, Lelièvre, C., Muñoz Sastre, M. T., Mullet, E., & Sorum, P. (2003). Deciding to end a patient's life. *Journal of Medical Ethics, 29,* 330-336.

Frileux, S., Muñoz Sastre, M. T., Antonini, S., Mullet, E., & Sorum, P. C. (2004). Acceptability for French people of physician-assisted suicide. *Death Studies, 28,* 941-953.

Fruchart, E., Rulence-Pâques, P., & Mullet, E. (2007). Ecological validity test of laboratory studies on information integration. *Teorie & Modelli* [Special Issue on Functional Measurement], *12*, 281-288.

Guedj, M., Gibert, M., Maudet, A, Muñoz Sastre, M. T., Mullet, E., & Sorum, P. C. (2005). Acceptability of ending a patient's life. *Journal of Medical Ethics, 31,* 311-317.

Guedj, M., Muñoz Sastre, M. T., Mullet, E., & Sorum, P. C. (2006). Under what conditions is the breaking of confidentiality acceptable to lay people and health professionals? *Journal of Medical Ethics, 32,* 414-419.

Guedj, M., Muñoz Sastre, M. T., Mullet, E., & Sorum, P. C. (2009). Is it acceptable for a psychiatrist to break confidentiality to protect a wife from violence? *International Journal of Law and Psychiatry,* in press.

Kastenbaum, R. (2000). *Death, society, and human experience* (7th edition). Boston: Allyn & Bacon.

Kleespies, P. M. (2004). *Life and death decisions*. Washington, DC : APA.

Kühberger, A. (1998). The influence of framing on risky decisions: A meta-analysis. *Organizational Behavior and Human Decision Processes, 75,* 23-55.

Levin, I. P., Louviere, J. J., Schepanski, A. A., & Norman, K. L. (1983). External validity of laboratory studies of information integration. *Organizational Behavior and Human Performance, 31,* 173-193.

Levin, I. P., Schneider, S. L., & Gaeth, G. J. (1998). All frames are not created equal: A typology and critical analysis of framing effects. *Organizational Behavior and Human Decision Processes, 76,* 149-188.

Maule, J., & Villejoubert, G. (2007). What lies beneath: Reframing framing effects. *Thinking and Reasoning, 13,* 25-44.

Muñoz Sastre, M. T., Pecarisi, C., Legrain, E., Mullet, E., & Sorum, P. C. (2007). Acceptability in France of induced abortion for adolescents. *American Journal of Bioethics, 7,* 26-32.

Murphy, P. (2007). French abortion opinion and the possibility of framing effects. *American Journal of Bioethics, 7,* 33-34.

Palmer, M. (2005). *Moral problems in medicine.* Cambridge, UK : Lutterworth.

Plous, S. (1993). *The psychology of judgment and decision-making.* New York: McGraw Hill.

Rosenfeld, B. (2004). *Assisted suicide and the right to die*. Washington, DC : APA.

Weir, R. F. (1997). *Physician-assisted suicide.* Bloomington and Indianapolis: Indiana University Press.

Teisseyre, N., Duarte dos Reis, I., Sorum, P. C., & Mullet, E. (2009). The acceptability among French lay persons of ending the lives of damaged newborns. *Journal of Medical Ethics*, in press.

Teisseyre, N., Mullet, E., & Sorum, P. C. (2005). Under what conditions is euthanasia acceptable to lay people and health professionals? *Social Science and Medicine, 60*, 357-368.

APPENDIX

Examples of vignettes

Mrs Endelin is 85 years old.
She has a serious illness, totally incurable given current knowledge.
She is currently receiving the best possible treatment.
She is completely dependent. S
he cannot breathe by herself and she cannot feed herself.
She has asked clearly and repeatedly to resort
to euthanasia or physician assisted suicide.
Do you think physician assisted suicide would be
an acceptable procedure in this case?

Not at all acceptable o---o---o---o---o---o---o---o---o---o---o---o---o---o---o---o Completely acceptable

Mrs Durand is 35 years old.
She has a serious illness, difficult to treat given current knowledge.
She is currently receiving the best possible treatment.
She suffers atrociously; pain medication cannot relieve her suffering.
She has never expressed a wish to resort
to euthanasia or physician assisted suicide.
Do you think physician assisted suicide would be
an unacceptable procedure in this case?

Not at all unacceptable o---o---o---o---o---o---o---o---o---o---o---o---o---o---o---o Completely unacceptable

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