

It's personal: The effect of personal value on utilitarian moral judgments

Charles Millar* Christina Starmans† Jonathan Fugelsang* & Ori Friedman‡

Abstract

We investigated whether the personal importance of objects influences utilitarian decision-making in which damaging property is necessary to produce an overall positive outcome. In Experiment 1, participants judged saving five objects by destroying a sixth object to be less acceptable when the action required destroying the sixth object directly (rather than as a side-effect) and the objects were personally important (rather than unimportant). In Experiment 2, we demonstrated that utilitarian judgments were not influenced by the objects' monetary worth. Together these findings suggest that personal importance underlies people's sensitivity to damaging property as a means for utilitarian gains.

Keywords: personal importance, value, moral decision-making, ownership.

1 Introduction

Like most people, you possess many objects. Although you may find many of these objects useful, probably just a few of them are personally important to you. For instance, you may have many articles of clothing, but only one favorite sweater. The importance you place on such cherished possessions is subjective and does not necessarily reflect their monetary value or their utility. For instance, your favorite sweater might have cost you relatively little (and it is surely worth even less money now) and it may not be particularly warm or attractive. Nonetheless, it may mean more to you than anything else that you own.

Personal attachment to objects begins in early childhood (Busch & McKnight, 1976; Winnicott, 1953) and manifests itself in an emotional attachment for certain objects and a preference for them over other objects — even exact duplicates (Frazier, Gelman, Wilson & Hood, 2009; Hood & Bloom, 2008; Schultz, Kleine & Kernan, 1989). Adults and children often look to their cherished items for comfort in times of distress (Diesendruck & Perez, 2015; Dyl & Wapner, 1996) and older adults use cherished possessions to help provide a sense of self-continuity and identity-maintenance (Kroger & Adair, 2008). Such findings suggest that per-

sonally important objects may be viewed as extensions of their owners and part of owners' identity (e.g., Belk, 1988; Kleine, Kleine & Allen, 1995).

Personal importance also influences how people think and feel about property loss. People are often unwilling to sell or exchange cherished possessions, and when they do sell them, they demand especially high prices (Hood & Bloom, 2008; Medin, Schwartz, Blok & Birnbaum, 1999; Nadler & Diamond, 2008). For instance, when reading vignettes discussing how much someone should sell their home for, participants indicate that more money should be requested if the home has been in the family for generations rather than only a few years (Nadler & Diamond, 2008). People report greater distress over the loss and damage of sentimental objects than other objects (Brown & Harris, 1989), and the psychological distress caused by damage to personal items is consistent with the pattern of distress exhibited by victims of physical assault (Wirtz & Harrell, 1987). Moreover, people report being more willing to go out of their way to seek compensation for damaged property if the property was personally important to them (Hsee & Kunreuther, 2000). Personal importance is also recognized in law enforcement as police employ more elaborate techniques when investigating burglaries of sentimental objects (Stenross, 1984), suggesting an appreciation for the distress the loss of cherished possessions causes.

1.1 Personal importance and utilitarian reasoning

In some situations, damaging someone's property — personally important or not — may be necessary in order to produce an overall better outcome. For instance, preventing paint from spilling onto a beautiful carpet may require ru-

Research was supported by a grant from the Social Sciences and Humanities Research Council of Canada awarded to O.F., and a grant from the Natural Sciences and Engineering Research Council of Canada awarded to J.F.

Copyright: © 2016. The authors license this article under the terms of the Creative Commons Attribution 3.0 License.

*University of Waterloo.

†Yale University.

‡Corresponding author: Department of Psychology, University of Waterloo, 200 University Avenue W, Waterloo, Ontario, Canada N2L 3G1. E-mail: friedman@uwaterloo.ca.

ining a towel; building a hospital may require tearing down a family home; and staving off frostbite might only be possible if a cherished book is used to fuel a fire. Such decisions, which favor making sacrifices in order to produce a net benefit, reflect utilitarian decision-making. However, according to legal theorist Margaret Radin (1982), such utilitarian decisions are less acceptable if the sacrificed object is personally important to its owner. Although it might normally be acceptable to sacrifice someone's towel to prevent paint from spilling onto a carpet, this might be unacceptable if the towel is personally important to the owner. According to Radin, this is because personally important items are bound up in their owner's identity, and the loss of such an item cannot be remedied. Consequently, the personal importance of an object may affect moral decision-making — forbidding otherwise acceptable actions or exacerbating the condemnation of some acts.

This possibility is relevant for theories of moral decision-making. Many studies have investigated factors affecting whether people endorse actions that secure an overall positive outcome while also causing harm (e.g., Cushman & Greene, 2012; Cushman, Young & Hauser, 2006; Petrich, O'Neill & Jorgensen, 1993). People often endorse such actions when they cause harm only indirectly, as a side-effect. For instance, people typically judge it acceptable to save five people from being killed by a trolley if this requires diverting the trolley so that it kills another person. However, people are less willing to endorse harmful actions that are *direct* and occur as a means-to-an-end. For example, people are less willing to endorse saving the five people when this goal requires pushing another man in front of the trolley. According to one proposal, people are reluctant to endorse utilitarian actions in such instances because they involve personal harm (i.e., harm that is directly applied to a victim), and considering such harm may trigger a prohibitive emotional response (Cushman & Greene, 2012; Greene, 2007; Greene et al., 2009; also see Royzman & Baron, 2002).¹

One potential difficulty for this “personal harm” account is that people are also unwilling to endorse utilitarian solutions that involve damage to owned property. In a recent study, participants judged it less acceptable to destroy one valuable tapestry to save five others when this damage occurred directly as a means rather than indirectly as a side-effect (Millar, Turri & Friedman, 2014). Another study found roughly similar judgments when the owned items were rucksacks containing personal items, such as phones and laptops (Gold, Pulford & Colman, 2013).

Such findings may conflict with the “personal harm” account: When an object is sacrificed there is no direct physical harm to a person, suggesting that sensitivity to the means/side-effect distinction might depend on relatively

general factors that are not limited to dilemmas where human victims are physically harmed (e.g., Cushman & Young, 2011; Mikhail, 2007, 2009; Royzman & Baron, 2002; Waldmann & Dieterich, 2007). However, an alternative explanation is that judgments of personal harm are the very thing underlying participants' reluctance to endorse sacrificing certain kinds of property. For example, the tapestries in Millar et al. (2014) were described as *unique* and *irreplaceable*, and so participants might have assumed that these tapestries were personally important to their owners. If so, they might have viewed sacrificing such a tapestry as a form of personally harming its owner. This possibility can be tested by examining whether utilitarian decision-making is influenced by whether a sacrificed object is personally important, or not, to its owner.

1.2 The current experiments

In two experiments, we examined whether the personal importance of an object affects utilitarian moral decision-making. In each experiment, participants read vignettes in which one object could be sacrificed to prevent five other objects from being destroyed. The objects were all owned by different people, but were all similarly valued by their owners. For instance, if the sacrificed object was personally important to its owner, than the other five objects were also personally important to their owners. In Experiment 1, we show that personal importance affects utilitarian decision-making when an object is damaged as a means, but not when it is damaged as a side-effect. In Experiment 2 we replicate this finding, and further show that similar effects are not also caused by another factor leading objects to be valued — monetary value.

2 Experiment 1

2.1 Method

Participants We tested 391 participants (mean age = 30.4 years; 41% female). In both experiments, participants were located in the United States and recruited using Amazon Mechanical Turk.

Materials and procedure. Participants read one of eight stories, in a 2x2x2 design manipulating whether the destruction of one object could occur as a means of saving five other objects or as a side-effect; whether the objects were personally important to their owner or not; and whether participants read a story about posters in an art class or one about clocks at an orientation.² To prevent participants from using information about personal importance to infer the monetary value of the objects (e.g., personally important = ex-

¹Over time, there has been much variation in how “personal harm” has been conceptualized (see Greene, 2009).

²All materials are in the Supplement.

pensive), all objects were described as inexpensive. In the poster story, five posters were in the path of spilled paint, which could destroy the posters. In the means conditions, an agent could prevent this outcome by placing a sixth poster in the path of the paint, destroying that poster in the process. In the side-effect conditions, the agent could instead block the paint from reaching the five posters, but with the side-effect of redirecting it towards the sixth poster. In the clock version, a dolly was rushing towards five clocks, and they would be broken if it collided with them. However this outcome could be prevented by throwing a sixth clock at the dolly to knock it over (means condition) or by throwing a stool at the dolly to redirect it, unintentionally, towards a sixth clock (side-effect condition).

After reading the story, participants answered a test question asking if it would be acceptable for the agent to destroy the sixth object in saving the other five. Participants responded using a 9-point scale, ranging from “1-Completely Unacceptable” to “9-Completely Acceptable”. Participants were then asked three story comprehension questions. See the Supplementary Materials for the stories and questions used in all experiments.

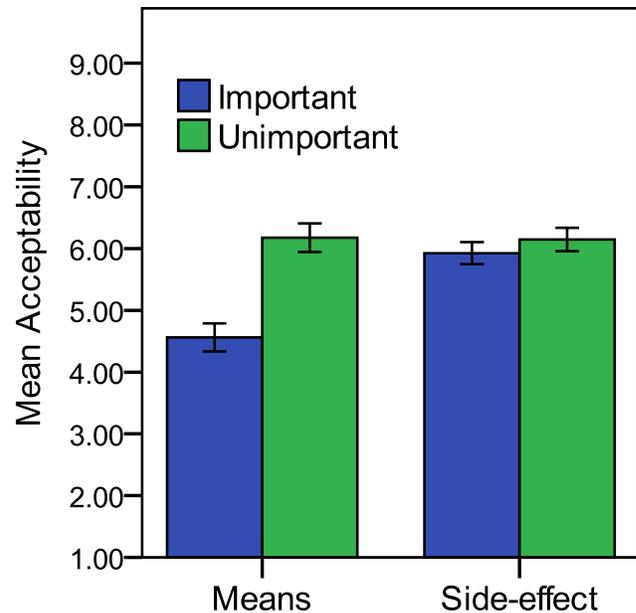
2.2 Results and discussion

Preliminary analysis revealed the same patterns of findings when we included all participants and when we excluded those who failed comprehension question ($n = 79$); hence we retained all participants for the main analysis. Preliminary analyses also revealed no main effect of cover story on judgments nor any interactions involving story, all p s $> .32$. As such, subsequent analyses collapsed across cover story.

A 2(means, side-effect) \times 2(important, unimportant) ANOVA revealed that participants were less accepting of destruction caused as a means than destruction caused as a side-effect ($F(1, 387) = 10.23, p = .001, \eta_p^2 = .03$). Participants were also less accepting of destroying the sixth object when objects were personally important to their owners than when they were not ($F(1, 387) = 19.36, p < .001, \eta_p^2 = .05$). Moreover, we found an interaction between means/side-effect and personal importance ($F(1, 387) = 11.18, p = .001, \eta_p^2 = .03$). As Figure 1 shows, when objects were personally important, participants were less accepting of destroying as a means, compared with destroying as a side-effect ($t(188.77) = -4.64, p < .001$). In contrast, when objects were personally unimportant, participants were not influenced by the means/side-effect distinction ($t(192) = .10, p = .919$). Moreover, participants judged it less acceptable to cause destruction as a means when the objects were personally important compared with when they were not important ($t(192) = -4.97, p < .001$). On the other hand, judgments of whether destruction could occur as a side-effect were not affected by personal importance ($t(195) = -0.84, p = .402$).

These findings suggest that people view it less accept-

Figure 1: *Experiment 1*. Mean acceptability ratings ranging from 1 (Completely Unacceptable) to 9 (Completely Acceptable); error bars reflect standard errors of the means.



able to destroy property to secure an overall positive outcome when items are personally important, and property is directly destroyed (i.e., as a means to an end). People might view this as less acceptable because personally important objects are closely connected with their owners (Belk, 1988; Radin, 1982). Hence, people might feel that an owner is personally harmed when their property is *directly* damaged or destroyed.

However, one limitation of our findings is that we only examined the effect of personal importance for judgments about inexpensive property (because all objects were described as inexpensive). Hence, the findings leave open the possibility that the interactions between means/side-effect and personal importance might not hold if the objects were expensive. Perhaps with expensive items, monetary considerations would overshadow personal importance, and participants would show sensitivity to the mean/side-effect distinction for expensive objects regardless of whether they were personally important or unimportant. To examine this possibility, participants in the next experiment read vignettes about items that independently varied in their personal importance and in their monetary worth.

3 Experiment 2

3.1 Method

Participants We tested 788 participants (mean age = 33 years; 40% female).

Materials and procedure. Participants read a story in which five mugs were in danger of being destroyed, but this could be avoided through the destruction of a sixth mug. Participants were assigned to one of eight conditions in a 2x2x2 design manipulating whether the destruction of the sixth mug could occur as a means of saving the others or as a side-effect; whether the mugs were expensive or inexpensive; and whether the mugs were personally important to their owners or not. Participants were then asked the test and comprehension questions, and a question about whether they had previously completed an experiment on trolley problems.

3.2 Results and discussion

Preliminary analysis revealed the same patterns of findings when we included all participants and when we excluded those who failed comprehension question ($n = 103$); hence we retained all participants for the main analysis. These analyses also revealed the same patterns of findings when we included and excluded participants who had previously completed an experiment on trolley problems, so we again retained all participants for the main analysis.

A 2(means, side-effect) x 2(expensive, inexpensive) x 2(important, unimportant) ANOVA revealed no effects of expense — monetary value did not affect judgments in a main effect or in any interactions (all $ps \geq .190$). However, replicating findings from Experiment 1, judgments were affected by both the means/side-effect distinction and by personal importance. Participants were less accepting of destruction done as a means than as a side-effect ($F(1,780) = 20.36, p < .001, \eta_p^2 = .03$), and they were less accepting of destroying the sixth object when objects were personally important to their owners ($F(1, 780) = 9.96, p = .002, \eta_p^2 = .01$).

Moreover, as in Experiment 1, there was an interaction between means/side-effects and personal importance ($F(1, 780) = 8.04, p = .005, \eta_p^2 = .01$). As Figure 2 shows, when the objects were personally important to their owners, participants judged it less acceptable to destroy the sixth object as a means than as a side-effect ($t(374.12) = 5.24, p < .001$). However, when the objects were personally unimportant, judgments were not affected by whether destruction occurred as a means or a side-effect ($t(393) = -1.20, p = .233$). Furthermore, participants were more accepting of destruction caused as a means when objects were unimportant compared with when they were important ($t(396) = 3.99, p < .001$), but for destruction caused as a side-effect, judgments were not affected by personal importance ($t(388) = 0.26, p = .799$).

These findings reveal that the interaction between the mean/side-effect distinction and personal importance holds both when items are inexpensive and when they are expen-

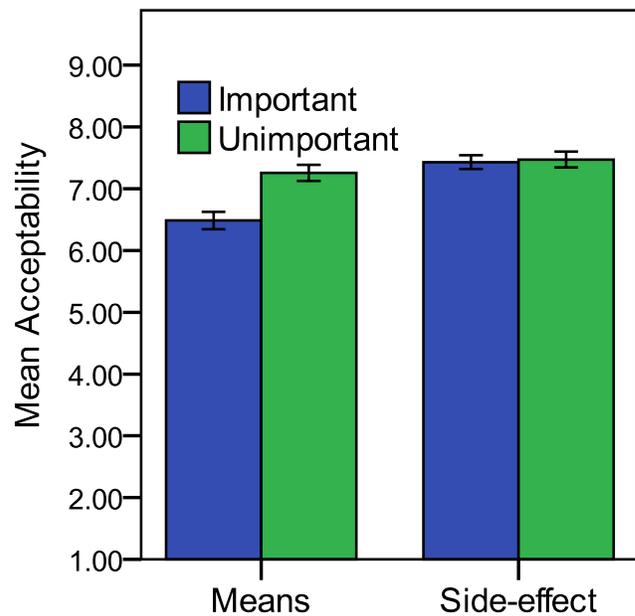


Figure 2: *Experiment 2.* Mean acceptability ratings ranging from 1 (Completely Unacceptable) to 9 (Completely Acceptable); error bars reflect standard errors of the means.

sive. The findings also suggest that when the personal importance of objects is equated, their monetary value may not influence utilitarian decision-making.

4 General discussion

We found that the personal importance of objects influences moral judgments. In two experiments, participants considered scenarios where an agent could act to save five objects from destruction at the cost of destroying a sixth object, and judged whether this action was acceptable. The acceptability of this action was reduced when two conditions were simultaneously met — when this required destroying the sixth object as a means (i.e., rather than as a side-effect) and when the objects were described as personally important to their owners.

This effect held up independently of the monetary value of the objects — it occurred for both inexpensive and expensive objects. In fact, we observed no effects of monetary worth for these particular items. So, although we found sensitivity to the means/side-effect distinction in scenarios about personally important objects, we did not find this in scenarios about expensive objects that were not personally important. This may be surprising given that Gold et al. (2013) found sensitivity to the mean/side-effect distinction in a vignette about economic harms that were not obviously personal. In that vignette, five people were in danger of losing contracts worth £10,000, but this could be prevented

by causing a sixth person to lose a contract for the same amount.

One possible explanation for this discrepancy is that people might be sensitive to the means/side-effect distinction when considering decisions about very large monetary sums (i.e., because Gold et al., specified very high monetary values, while we did not). Alternatively, it could be that participants in Gold et al. inferred that highly valued contracts are usually personally important to their recipients.

Regardless, the present findings suggest that people's judgments are broadly consistent with Radin's (1982) claim that utilitarian decisions are less acceptable if they involve the sacrifice of an object that is personally important to its owner. However, some of our findings suggest that judgments do not neatly align with Radin's view. Specifically, in our experiments participants judged it less acceptable to directly destroy a personally important object even though this was necessary to save other objects that were also personally important to their owners. If personal importance were paramount to participants, then they should have viewed such utilitarian actions as acceptable — such actions allow more personally important items to be saved. Also, Radin's approach does not explain why participants were sensitive to the means/side-effects distinction.

The findings might be better explained by a more recent account of moral decision-making, which holds that people are reluctant to endorse utilitarian actions when they involve "personal harm" — considering such harmful actions is thought to generate prohibitive emotional responses (Cushman & Greene, 2012; Greene, 2007, 2009; Greene et al., 2009; Moore, Clark & Kane, 2008). Our findings are broadly consistent with this claim, at least if people typically view owned objects as extensions of their owners, or as bound up in their owner's identities. If people do conceive of owned property in this way, then they might view the direct sacrifice of such objects as a form of personal harm. On this view, participants judged it less acceptable to destroy a personally important object as a means because this personally harmed its owner; destruction was more acceptable when it occurred as a side-effect, because such indirect harm is not viewed as personal. On this account, our findings suggest that the aversion to causing personal harm is not limited to the victim's physical body, but extends to the victim's important possessions as well.

4.1 Limitations and future directions

Although we have interpreted our findings as contributing to our understanding of moral decision-making, it is possible that the findings are not about morality *per se*. We asked participants to judge the acceptability of possible actions, rather than specifically asking about *moral* acceptability. Hence, it is possible that participants answered the test

question by thinking about other types of acceptability, such as social or legal acceptability. It would be useful for future investigations of the role of personal importance on utilitarian decision-making to focus more directly on moral acceptability.

Future research could also try to attempt to come to a more exact understanding of the scope of people's sensitivity to personal importance. A first question concerns whether the effects we observed were driven by personal importance *per se*, or instead by some closely related factor. For example, it is possible that participants were actually sensitive to whether objects were unique or irreplaceable, a characteristic which might be implied by a personal or sentimental connection to an object. If so, similar findings might be obtained by manipulating whether objects are unique, even if it were specified that they were not personally important to anyone. However, we think this is unlikely because participants in Millar et al. (2014) found it perfectly acceptable for an agent to sacrifice their own property as a means, even though the property was described as unique. This suggests that participants' sensitivity to the means-side effect distinction hinges on factors relating the sacrificed object to its owner (e.g., personal importance) rather than on factors which primarily pertain to the object (e.g., uniqueness). Nonetheless, it is possible that some other related factor could underlie the present findings.

A second question of scope concerns whether the effects of personal importance are limited to judgments concerning the destruction of owned objects, or whether they could influence judgments for many other kinds of negative actions. For instance, these effects might also arise in dilemmas in which people's goals are frustrated or their relationships are disrupted, because, like owned property, goals and interpersonal relationships can vary in personal importance. Similar effects could arise even for actions that physically affect people's bodies and physical functioning — people likely give more personal importance to some aspects of their physical selves than others, so personal importance might affect moral judgments about harm to human bodies, much as it affects judgments about the destruction of owned property.

References

- Belk, R. (1988). Possessions and the extended self. *Journal of Consumer Research*, 15, 139–168.
- Brown, B. B., & Harris, P. B. (1989). Residential burglary victimization: Reactions to the invasion of a primary territory. *Journal of Environmental Psychology*, 9, 119–132.
- Busch, F., & McKnight, J. (1976). Theme and variation in the development of the first transitional object. *The International Journal of Psycho-Analysis*, 58, 479–486.

- Cushman, F., & Greene, J. D. (2012). Finding faults: How moral dilemmas illuminate cognitive structure. *Social Neuroscience*, 7, 269–279.
- Cushman, F., & Young, L. (2011). Patterns of moral judgment derive from nonmoral psychological representations. *Cognitive Science*, 35, 1052–1075.
- Cushman, F., Young, L., & Hauser, M. (2006). The role of conscious reasoning and intuition in moral judgment testing three principles of harm. *Psychological Science*, 17, 1082–1089.
- Diesendruck, G., & Perez, R. (2015). Toys are me: Children's extension of self to objects. *Cognition*, 134, 11–20.
- Dyl, J., & Wapner, S. (1996). Age and gender differences in the nature, meaning, and function of cherished possessions for children and adolescents. *Journal of Experimental Child Psychology*, 62, 340–377.
- Frazier, B. N., Gelman, S. A., Wilson, A., & Hood, B. M. (2009). Picasso paintings, moon rocks, and hand-written Beatles lyrics: Adults' evaluations of authentic objects. *Journal of Cognition and Culture*, 9, 1–14.
- Gold, N., Pulford, B. D., & Colman, A. M. (2013). Your money or your life: Comparing judgements in trolley problems involving economic and emotional harms, injury and death. *Economics and Philosophy*, 29, 213–233.
- Greene, J.D. (2007). Why are VMPFC patients more utilitarian?: A dual-process theory of moral judgment explains. *Trends in Cognitive Sciences*, 8, 322–323.
- Greene, J. D. (2009). Dual-process morality and the personal/impersonal distinction: A reply to McGuire, Langdon, Coltheart, and Mackenzie. *Journal of Experimental Social Psychology*, 45, 581–584.
- Greene, J.D., Cushman, F.A., Stewart, L.E., Lowenberg, K., Nystrom, L.E., and Cohen, J.D. (2009) Pushing moral buttons: The interaction between personal force and intention in moral judgment. *Cognition*, 111, 364–371
- Hood, B. M., & Bloom, P. (2008). Children prefer certain individuals over perfect duplicates. *Cognition*, 106, 455–462.
- Hsee, C. K., & Kunreuther, H. C. (2000). The affection effect in insurance decisions. *Journal of Risk and Uncertainty*, 20, 141–159.
- Kleine, S. S., Kleine III, R. E., & Allen, C. T. (1995). How is a possession “me” or “not me”? Characterizing types and an antecedent of material possession attachment. *Journal of Consumer Research*, 22, 327–343.
- Kroger, J., & Adair, V. (2008). Symbolic meanings of valued personal objects in identity transitions of late adulthood. *Identity: An International Journal of Theory and Research*, 8, 5–24.
- Medin, D. L., Schwartz, H. C., Blok, S. V., & Birnbaum, L. A. (1999). The semantic side of decision making. *Psychonomic Bulletin & Review*, 6, 562–569.
- Mikhail, J. (2007). Universal moral grammar: Theory, evidence and the future. *Trends in Cognitive Sciences*, 11, 143–152.
- Mikhail, J. (2009). Moral grammar and intuitive jurisprudence: A formal model of unconscious moral and legal knowledge. *Psychology of Learning and Motivation*, 50, 27–100.
- Millar, J.C., Turri, J., & Friedman, O. (2014). For the greater goods? Ownership rights and utilitarian moral judgment. *Cognition*, 133, 79–84.
- Moore, A. B., Clark, B. A., & Kane, M. J. (2008). Who shalt not kill? Individual differences in working memory capacity, executive control, and moral judgment. *Psychological Science*, 19, 549–557.
- Nadler, J., & Diamond, S. S. (2008). Eminent domain and the psychology of property rights: Proposed use, subjective attachment, and taker identity. *Journal of Empirical Legal Studies*, 5, 713–749.
- Petrinovich, L., O'Neill, P., & Jorgensen, M. (1993). An empirical study of moral intuitions: Toward an evolutionary ethics. *Journal of Personality and Social Psychology*, 64, 467–478.
- Radin, M. J. (1982). Property and personhood. *Stanford Law Review*, 34, 957–1015.
- Royzman, E. B., & Baron, J. (2002). The preference for indirect harm. *Social Justice Research*, 15, 165–184.
- Schultz, S. E., Kleine, R. E., & Kernan, J. B. (1989). ‘These are a few of my favorite things’: Toward an explication of attachment as a consumer behavior construct. *Advances in Consumer Research*, 16, 359–366.
- Stenross, B. (1984). Police response to residential burglaries. *Criminology*, 22, 389–402.
- Waldmann, M. R., & Dieterich, J. H. (2007). Throwing a bomb on a person versus throwing a person on a bomb intervention myopia in moral intuitions. *Psychological Science*, 18, 247–253.
- Winnicott, D. W. (1953). Transitional objects and transitional phenomena — a study of the first not-me possession. *International Journal of Psycho-Analysis*, 34, 89–97.
- Wirtz, P. W., & Harrell, A. V. (1987). Victim and crime characteristics, coping responses, and short-and long-term recovery from victimization. *Journal of Consulting and Clinical Psychology*, 55, 866–871.