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# A Prototype Analysis of Forgiveness

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*Many definitions of forgiveness currently exist in the literature. The current research adds to this discussion by utilizing a prototype approach to examine lay conceptions of forgiveness. A prototype approach involves categorizing objects or events in terms of their similarity to a good example, whereas a classical approach requires that there are essential elements that must be present. In Study 1, participants listed the features of forgiveness. Study 2 obtained centrality ratings for these features. In Studies 3 and 4, central features were found to be more salient in memory than peripheral features. Study 5 showed that feature centrality influenced participants' ratings of victims involved in hypothetical transgressions. Thus, the two criteria for demonstrating prototype structure (that participants find it meaningful to judge features in terms of their centrality and that centrality affects cognition) were met.*

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**Keywords:** *forgiveness; prototype analysis; lay conceptions; concept definition*

Although scientists have paid remarkably little attention to forgiveness, research on this topic has recently mushroomed (for a bibliography, see McCullough, Exline, & Baumeister, 1998). This change is stimulated, in part, by interest in the potential benefits of forgiving. For example, interventions to increase forgiveness have been shown to reduce anger and grief among men whose partners had abortions (Coyle & Enright, 1997) and to lead to significantly greater decreases in both anxiety and depression among female incest victims when compared to a control group (Freedman & Enright, 1996). It also appears that forgiveness may have physical as well as psychological benefits. Witvliet, Ludwig, and Van Der Laan (2001) demonstrated that engaging in unforgiving imagery produced more negative emotions and greater physiological stress, whereas forgiving imagery produced lower physiological stress levels.

With the upsurge in research on forgiveness has come a variety of definitions of the construct. Although there is

overlap in these definitions, there are also substantial differences. For example, no consensus exists on the dimensions of forgiveness (Touissant, Williams, Musick, & Everson, 2001) or the steps and processes that it involves (Denton & Martin, 1998). The extent of disagreement among researchers can be illustrated by considering a single issue, the relation between forgiveness and reconciliation. Some have argued that forgiveness does not require reconciliation with the offending party and should be viewed separately from forgiveness (Enright & The Human Development Study Group, 1991; Fincham, 2000). Others, however, have emphasized the exact opposite, that reconciliation is an important aspect of forgiveness (Hargrave & Sells, 1997).

## *Research on the Definition of Forgiveness*

In light of the diversity surrounding the definition and measurement of forgiveness, it is not surprising that a few researchers have conducted research on the very definition of forgiveness. For example, Denton and Martin (1998) assessed a sample of experienced clinicians for their perceptions of a standard definition of forgiveness that was proposed by Enright and Zell (1989). The majority of respondents agreed or strongly agreed with four of the six elements that made up the definition of forgiveness. A minimum of 80% or more agreed that forgiveness was an inner process of releasing anger and fear, that forgiveness reduced the desire to retaliate, that forgiveness took time and may be a slow process, and that in forgiveness one does not need to forget the painful incident. However, on two of the six definitional ele-

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**Authors' Note:** The preparation of this article was supported by a grant from the Templeton Foundation awarded to the second author. Correspondence concerning this article should be addressed to Jill N. Kearns, Psychology Department, University at Buffalo, Buffalo, NY 14260; e-mail: jkearns@acsu.buffalo.edu.

*PSPB*, Vol. 30 No. 7, July 2004 838-855  
DOI: 10.1177/0146167204264237

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ments, the sample was evenly split. Although 50.5% of clinicians agreed that forgiveness must take place between two people, 49.5% were neutral or disagreed. A greater number of respondents disagreed or were neutral (58.5%) than agreed (41.5%) with the proposition that forgiveness must follow a long-lasting psychological, emotional, or moral hurt.

Wade (1989) also attempted to develop an empirically based definition of forgiving. She conducted interviews with 20 academic psychologists, clinical psychologists, and pastors about the nature of forgiving. From these interviews, she generated 600 items that captured various elements about how these experts defined forgiving. These items were reduced into a smaller set that was administered to 282 college students who were instructed to complete the items as they thought about a relationship partner who had offended them in the past. Half of the students were instructed to think of an offending partner whom they had forgiven and half were instructed to think of an offending partner whom they had not forgiven. Eighty-three items distinguished the students who had been instructed to think of someone whom they had forgiven from the students who were instructed to think of someone whom they had not forgiven. These items were divided into nine subscales that constitute Wade's (1989) Forgiveness Scale. McCullough and colleagues (1998) later used two subscales from this measure (revenge and avoidance) to construct the Transgression-Related Interpersonal Motivations (TRIM) inventory, one of the most widely used self-report measures of forgiveness today.

Although most attempts to develop empirically based definitions of forgiveness have thus far been limited to expert judgments, a few studies have begun to examine how laypeople understand forgiveness. For example, Kantz (2000) had participants complete 23 yes or no questions that were developed by examining the forgiveness literature and were meant to be representative of the key concepts that are commonly addressed. Results suggested that people conceptualized forgiveness in a similar manner to that of forgiveness researchers. For example, they agreed that it is possible to forgive someone without the person being aware of it, anger decreases when forgiveness takes place, and that it is easier to forgive a friend or family member than a stranger. There were, however, a few areas in which they differed. For example, the majority of the sample believed that reconciliation was a necessary part of forgiveness and many participants believed that forgiveness could cause emotional problems.

Zechmeister and Romero (2002) also explored laypersons' perceptions of forgiveness. They had participants write two narratives that described an incident in which they angered or hurt someone or in which some-

one angered or hurt them and the offense was forgiven or not forgiven. Their results demonstrated that perceptions of interpersonal offenses depend both on one's role as the victim or offender and on whether they have forgiven the offense. More specifically, they found that forgiveness narratives included more descriptions of positive outcomes and positive affect than did the unforgiveness narratives. They were also more likely to include features that indicated that the offender and the victim had achieved closure about the offense.

#### *Why Are Lay Conceptions of Forgiveness Important?*

There has been little psychological research that examines individuals' concepts of forgiveness and their understanding of what it means to forgive. This is an important limitation in the forgiveness literature because there are a number of ways in which lay conceptions of forgiveness are likely to inform not only theory and research about forgiveness but also the use of forgiveness in an applied setting as a therapeutic tool.

Several researchers have attempted to understand the social and cognitive variables that are most likely to encourage or impede forgiveness (e.g., Boon & Sulsky, 1997; McCullough & Worthington, 1994). For example, investigators have examined perceptions of the severity of the offense (Boon & Sulsky, 1997), attributions about the intentions of the offender (Al-Mabuk, Dedrick, & Vanderah, 1998), and empathy (McCullough & Worthington, 1994) as determinants of forgiveness. It is likely that how an individual conceptualizes and understands forgiveness will be important when attempting to understand the likelihood of forgiveness in specific circumstances. For instance, if an individual believes that to forgive an offender they must resume a relationship with that person, they may be reluctant to forgive. In contrast, an individual who does not believe that reconciliation is a necessary component of forgiveness may have an easier time forgiving.

Understanding lay conceptions of forgiveness also may have important implications for the measurement of forgiveness. Many studies (e.g., Boon & Sulsky, 1997; Darby & Schlenker, 1982; Weiner, Graham, Peter, & Zmuidinas, 1991) measure forgiveness with one item, usually some form of the question, "Have you forgiven?" If we do not understand what people mean when they say they "forgive" or "do not forgive," it makes it very difficult to understand what these measures mean. Furthermore, an assumption in most measures of forgiveness is that what the investigator is measuring corresponds with the idea of forgiveness in the mind of the participant. An important step in forgiveness research is to describe what people mean when they say they "forgive" or "do not forgive" and to compare these meanings to expert definitions of forgiveness.

Finally, understanding lay conceptions of forgiveness also has the potential to contribute to the advancement of forgiveness as a psychotherapeutic process. A great deal of forgiveness research has focused on its utility as an educational and therapeutic intervention for individuals seeking relief from anger and resentment caused by a transgression. Understanding how people outside of the research community conceptualize and experience forgiveness may help researchers to develop improved psychoeducational and therapeutic techniques. For example, individuals may be unwilling to forgive an offender because of the fear of being viewed as weak or the fear of putting themselves at an increased risk for future betrayals. However, several authors have suggested that if forgiveness is properly defined for laypeople, then these concerns are no longer relevant (e.g., Enright, Eastin, Golden, Sarinopoulos, & Freedman, 1992; Enright, Gassin, & Wu, 1992). Presumably, a person who willingly attempts any or all of the forgiveness processes as outlined by Enright and The Human Development Study Group (1991) and others should only experience positive outcomes (e.g., decreased anger) as a result of forgiveness. Therefore, it is important to know how people think about forgiveness so that we can address any negative notions that they may have about it.

#### *A Prototype Perspective*

The extent to which lay conceptions of forgiveness correspond with experts' constructions is an empirical question that can and should be answered. We propose that an understanding of how ordinary people think about and experience forgiveness can be advanced through the use of a prototype approach. Prototype theory has given us insights into many concepts that are central to psychology. For example, Fehr (1988) demonstrated that both love (which included central features such as trust, honesty, and respect) and commitment (which included central features such as loyalty, responsibility, and living up to your word) have a prototypic structure. Sharpsteen (1993) found that participants were able to compile a list of prototypic features of romantic jealousy and that they were able to reliably rate the centrality of each of these features. Furthermore, participants' recognition of jealousy's features in a memory task and judgments of jealousy intensity were influenced by feature centrality. Finally, Hassebrauck (1997; Hassebrauck & Fehr, 2002) has used a prototype analysis of the construct of relationship quality to identify four underlying dimensions: intimacy, agreement, independence, and sexuality.

Rosch (1975) was the first to distinguish prototype theory as an alternative to the classical view of concept definition. The classical view of defining concepts

assumes that category membership is an all or none phenomenon; any instance that meets the criteria is a member and all others are not. Because each member must possess the same set of attributes that is the criterion for category inclusion, all members of a category are assumed to be equally representative. Rosch (1975) argued that many natural language concepts do not lend themselves to definition in terms of a set of necessary and sufficient conditions. Rather, she proposed that many natural language categories are internally structured into a prototype of a category surrounded by other members that can be ordered in terms of their degree of similarity to the prototypical cases. Thus, an animal is more likely to be categorized as a bird if it is similar to a prototypical bird such as a sparrow than if it is similar to a nonprototypical exemplar such as a penguin.

If a concept is prototypically organized, it has an internal structure. This means that some of its features are more strongly associated with the concept than are others. More specifically, Rosch (1978) differentiates between a vertical and horizontal dimension of categories. The vertical dimension refers to the hierarchical organization of categories, or the relationship that a category has to a superordinate or subordinate category. The horizontal dimension concerns the segmentation of categories at the same level of inclusiveness. The present study focused on the horizontal dimension, or the differentiation of categories on the same level.

The prototype approach differs from the classical approach in that it involves flagging central features rather than identifying critical features. This means that not all instances of a concept are expected to share all of the features of the prototype. According to Rosch (1975), two criteria must be met to argue that a concept is prototypically organized. First, individuals must be able to identify the features of the concept and make meaningful judgments about the strength of a feature's association with the concept. Moreover, there must be substantial agreement about the features that are central and peripheral. Second, the centrality of these features should affect cognition with respect to that concept.

It should be noted, however, that it is important to distinguish empirical findings about prototypicality from theories of processing. The fact that prototypicality is reliably rated and is correlated with category structure is not meant to have clear implications for a theory of cognitive representation of categories. According to Rosch (1978), however, what is clear is that prototypicality of items can be shown to affect many measures of cognition (e.g., speed of processing/reaction time, priming, the logic of natural language use of category terms).

The failure to agree on a definition of forgiveness suggests that researchers are unsure of what to include and what not to include in the definition of forgiveness.

When viewed from the prototype perspective, this inability to come to a consensus makes sense. It is possible that forgiveness, similar to many natural language concepts, does not lend itself to definition in terms of a set of necessary and sufficient critical features. This classical view of defining concepts assumes that category membership is an all or none phenomenon; any instance that meets the criteria is a member and all others are not. Because each member must possess the same set of attributes that is the criterion for category inclusion, all members of a category are assumed to be equally representative. This, however, does not appear to be true of the concept of forgiveness where researchers, and their research participants, recognize degrees of forgiveness. Therefore, we propose that forgiveness is prototypically organized.

It is important to note, however, that by advocating a prototype view of forgiveness, we do not mean to imply that forgiveness cannot be defined, and we do not propose that lay conceptions of forgiveness must map onto experts' conceptions. Moreover, we are not suggesting that the scientific study of forgiveness must rely on lay conceptions to truly understand the concept. Rather, we propose that utilizing prototype theory to understand lay conceptions can help advance the scientific study of forgiveness. This issue will be discussed in greater detail after the results of the current studies are described.

#### *Overview*

The purpose of the current studies was to better understand lay conceptions of forgiveness by utilizing a prototype approach. To do this, we (a) documented features that laypersons view as characteristics of the concept of forgiveness, (b) determined which of these features are considered central to the concept of forgiveness, and (c) examined how feature centrality affected the way that forgiveness was thought about. In doing this, we adhered closely to the methodology and procedures used by previous prototype researchers (e.g., Fehr, 1988; Sharpsteen, 1993).

We conducted a series of five studies. In Study 1, participants listed the features of forgiveness in a free-response format. Another group of participants then rated these features for their centrality in Study 2. We expected that certain features would be seen as more central to the concept of forgiveness and would affect performance in subsequent studies. In Studies 3 and 4, we examined how feature centrality affects cognition by using recall and recognition memory tasks. We predicted that central attributes would be more salient in memory than peripheral attributes. Study 5 examined how judgments of victims involved in hypothetical transgressions were influenced by feature centrality. We hypothesized that victims involved in transgressions that

included central features of forgiveness would be seen as more forgiving and less vengeful than victims involved in transgressions that included peripheral features.

#### STUDY 1:

##### COMPILATION OF PROTOTYPIC FEATURES

The goal of Study 1 was to compile the features of the concept of forgiveness. This was done by asking participants to list all of the features of forgiveness that they could think of in a free-response format. We also examined whether the forgiveness features were considered to be positive or negative.

#### *Method*

##### *PARTICIPANTS*

Participants included 208 undergraduate students (105 men, 103 women) enrolled in introductory psychology courses at the State University of New York at Buffalo. Participants were, on average, 21 years old. Approximately half of the sample was Caucasian (53%), whereas the remaining participants were African American (7%), Asian (28%), or Latino (5%). Approximately 7% of participants reported that they were of other various ethnic backgrounds. The majority of participants were either Catholic (34%) or Protestant (16%). An additional 9% indicated that they were Jewish, whereas 3% identified themselves as Muslims; 12% of the sample described themselves as being atheist or agnostic. The remainder of the sample (27%) indicated "other" as their religious preference.

##### *PROCEDURE*

Participants were given the following instructions (adapted from Fehr & Russell, 1984, Study 6):

This is a study on the characteristics and attributes that people think of when they think of the word *forgiveness*. For example, if you were asked to list the characteristics of a person experiencing fear, you might write: possible danger occurs, attention is focused on the threat, heart beats wildly, the person runs as fast as they can. In the current study, we are not interested in attributes of fear but in attributes of forgiveness. Imagine that you are explaining the word *forgiveness* to someone who has no experience of forgiveness. Include the obvious. However, try not to just free-associate. We're interested in what is common to instances of forgiveness. Remember that these attributes can be positive or negative.

Participants were then instructed to list in a free-response format all of the attributes of forgiveness that came to mind during a 15-min period. They were given a page with 20 lines on it and were instructed to list one attribute per line. After they finished this task, partici-

participants rated each of the features for its positivity (on a scale ranging from 3 = *extremely positive* to -3 = *extremely negative*). If the feature was not at all positive or negative, they were instructed to write a zero beside it.

### Results

Two research assistants compiled a verbatim list of the features identified by participants. These features were grouped into larger categories following the procedure used by Fehr (1988), which was adapted from Rosenberg and Jones (1972) and Rosenberg and Sedlak (1972). The first step involved the extraction of linguistic units. Monolexemic items, such as *acceptance* or *understanding*, were easily identified as distinct features. However, when a participant used a phrase, it was necessary to judge whether it referred to a single feature or if it could be divided into two or more linguistic units (attributes). If an attribute preceded or was followed by a descriptive word or phrase (e.g., *extremely understanding*), it was coded as a single attribute. The total number of linguistic units extracted from the feature lists was 2,385. On average, participants generated approximately 8.86 features.

Next, these linguistic units were placed into attribute categories. Linguistic units were considered to belong to the same category if they were different only because they were modified by adjectives or adverbs such as *extremely* or *slightly*, if they were merely different grammatical forms of the same word, or if they were judged to be similar or identical in meaning. Throughout this process, the coders attempted to be conservative but not treat words or phrases that were redundant as separate attributes. For example, "talking about the problem" was included with "communication" and "putting a situation behind," "able to put things behind you," and "putting the past behind you" were all included in the category "moving on." Interrater reliability was established using Cohen's kappa ( $\kappa = .76$ ). Discrepancies were resolved by a third coder.

This coding procedure yielded a total of 477 forgiveness attributes ( $M = 8.86$ ,  $SD = 3.84$ ). Of these, 387 responses were idiosyncratic (mentioned by only one participant). Examples of idiosyncratic items included attributes such as "to live in a globe," "to warm up to life," and "bones feel weak." These responses were discarded, leaving a final list of 78 attributes (see Table 1). One attribute was mentioned by 33% of respondents, 8 by at least 20%, and 19 by at least 10% of respondents.

Participants rated the features to be slightly positive ( $M = .82$ ,  $SD = 1.23$ ). However, the positivity of the feature was not significantly correlated with how frequently it was mentioned ( $r = .21$ , *ns*). Some of the most frequently mentioned attributes were positive (e.g., *understanding*) and some were negative (e.g., *consequence of a*

wrongdoing). Some of the most positive attributes listed included items such as *honesty*, *maturity*, and *an act of love*, whereas some of the most negative attributes were still holding a grudge, a sign of weakness, *hate*, and giving the person permission to do it again.

### Discussion

No single feature was mentioned by all of the participants. Rather, there was substantial variability in how frequently each feature came to mind. For example, 33% of respondents listed a consequence of a wrongdoing as a feature of forgiveness, whereas only 1% mentioned having the upper hand. However, participants did agree on certain features. Other frequently listed features included *understanding*, *relief*, *forgetting the incident*, and *an act of love*. On the other hand, some features that are intuitively relevant to a definition for forgiveness such as saying "I forgive you" were listed by fewer than 4% of participants. These results indicate that there are neither necessary nor sufficient features, as one would expect to find given a classical definition of a concept.

For ease of presentation, the features of forgiveness are described in terms of clusters or themes that characterized the responses. There was one large cluster of features that was positive in affective tone; participants wrote about feelings of happiness, kindness, compassion, and so on. Of interest, there are also features of forgiveness that are negative in tone; more than one participant mentioned features such as *sadness*, *hurt or pain*, *questioning if you made the right decision*, *giving the person permission to do it again*, and *fear*.

The prototype of forgiveness also includes behaviors such as *talking things out*, *physical acts* (e.g., *hugs and kisses*), *buying the offended person things*, and *accepting someone's apology*. Participants also listed cognitive activities such as *understanding that everyone makes mistakes* and *thinking about the future*. Of interest, participants also listed features suggestive of an expectation that forgiveness leads to the continuance of the relationship (e.g., *everything continues as normal*, *giving someone a second chance*, and *bringing the other person back into your life*).

### STUDY 2:

#### CENTRALITY RATINGS OF FORGIVENESS FEATURES

If a concept possesses a prototypical structure, then certain features must not only be seen as being representative of the concept; participants must be able to make meaningful judgments about whether the features of the concept are central or peripheral. Moreover, there must be substantial agreement on these judgments. The purpose of this study was to gather information about the

TABLE 1: Forgiveness Features

Feature	Study 1		Study 2	
	Percentage of Participants	Positivity Rating	Centrality Rating	SD
Consequence of a wrongdoing	33.33%	-1.08	4.62	1.52
Understanding	29.17%	1.81	6.42	1.08
Relief	27.60%	1.91	6.25	1.43
Forgetting the incident	27.60%	0.94	4.58	1.95
An act of love	27.60%	2.38	6.77	1.07
Moving on	26.56%	1.43	6.14	1.32
Feeling happy/joyful	24.48%	1.80	6.37	1.31
Reconciling	21.35%	1.92	6.62	1.09
Empathy	20.31%	1.64	6.59	1.33
Acceptance	19.79%	1.50	6.38	1.09
Physical acts	19.27%	1.60	5.88	1.45
Perpetrator feels sorry or regretful	18.75%	-0.31	6.44	1.32
Religious act	18.23%	1.86	5.06	2.06
Talking things out	18.23%	1.60	6.52	1.40
Done to preserve the relationship	17.71%	1.13	6.04	1.70
Letting it go	16.67%	1.14	5.58	1.76
An act of kindness	15.63%	1.84	6.57	1.31
Not holding a grudge	15.63%	1.65	6.40	1.44
Letting go of anger	15.63%	1.55	5.98	1.40
Having peace of mind	15.63%	2.06	6.30	1.32
Perpetrator says they're sorry	15.10%	1.15	5.48	1.93
Still think about the incident	13.54%	-0.81	4.29	1.80
Sadness	13.02%	-1.52	4.46	1.45
Understanding that everyone makes mistakes	13.02%	1.48	6.72	1.22
Not worrying that the event will happen again	12.50%	1.75	4.56	1.85
Telling the person it's okay what they did	11.98%	0.77	4.21	1.87
Crying	11.46%	0.13	4.31	1.93
Still lack of trust	10.94%	-1.23	3.34	1.77
Caring	10.94%	1.83	7.07	1.00
Finding a solution to a problem	9.90%	1.67	6.78	1.22
Giving in	9.90%	-1.47	3.27	1.61
Not wanting or seeking revenge	9.90%	1.40	6.19	1.69
Difficult to do	9.38%	-0.83	4.73	1.60
Being angry	9.38%	-1.57	3.57	1.77
Having sympathy for the perpetrator	9.38%	0.94	5.23	1.60
Giving someone a second chance	9.38%	1.50	6.82	1.17
Open-minded	9.38%	1.43	7.09	1.07
Freeing another person of blame	8.85%	1.27	5.50	1.75
Perpetrator admits they're wrong	8.85%	0.60	6.38	1.55
Accepting someone's apology	8.85%	1.33	6.77	1.08
Hurt/pain	8.85%	-1.56	3.47	1.62
Makes you feel good afterward	8.33%	1.92	6.70	1.30
Learning from mistakes	8.33%	1.42	6.85	1.15
Takes time	7.81%	0.40	5.51	1.59
Starting over	7.81%	1.50	5.99	1.35
Happens between friends	7.81%	1.31	5.64	1.64
Maturity	7.81%	2.46	6.66	1.42
A sign of weakness	7.81%	-2.05	2.94	1.50
Nice	7.81%	1.53	6.26	1.39
Being the bigger person	7.29%	1.83	5.99	1.68
Making amends	6.77%	1.54	6.64	1.44
Thinking about the situation	6.77%	0.00	6.30	1.26
A positive characteristic to have	6.77%	1.25	6.62	1.30
Truthful	6.77%	2.00	7.36	.96
Emotional	6.25%	0.09	5.39	1.48
Sincerity	6.25%	1.60	7.15	1.16

(continued)

TABLE 1: Forgiveness Features

Feature	Study 1		Study 2	
	Percentage of Participants	Positivity Rating	Centrality Rating	SD
Makes you feel good about yourself	6.25%	1.63	6.53	1.54
Everything continues as normal	5.73%	1.00	4.50	1.88
Perpetrator does not feel guilty anymore	5.73%	1.64	5.31	2.02
Questioning if you made the right decision	5.73%	-1.62	4.34	1.61
Fear	5.21%	-0.82	3.51	1.55
Generosity/not being selfish	5.21%	1.50	6.42	1.19
Happens among family members	4.69%	1.27	5.31	1.73
Giving the person permission to do it again	4.69%	-1.89	2.70	1.87
Focusing on the good instead of the bad	4.69%	1.83	6.20	1.60
Something that you're supposed to do	4.69%	0.11	4.62	2.08
Compassion	4.17%	2.38	6.13	1.29
Something you ask for	3.65%	-0.14	5.30	1.44
Buying the other person things	3.65%	0.20	4.21	2.06
Think about the future	3.65%	1.67	6.20	1.35
Doing the right thing	3.65%	1.50	6.79	1.21
End to fighting	3.65%	0.71	6.35	1.51
Still holding a grudge	3.65%	-2.67	2.64	1.50
Respect	3.13%	2.00	6.63	1.19
Saying "I forgive you"	3.13%	0.83	5.88	1.83
Confusion	3.13%	-0.33	3.78	1.44
Compromising	3.13%	0.33	6.26	1.30
Pretending the incident didn't happen	3.13%	-0.50	2.85	1.60

centrality of the forgiveness features that were gathered from Study 1.

#### Method

Participants included 137 introductory psychology students (96 men, 41 women) ranging in age from 17 to 26 years ( $M = 19.28$ ,  $SD = 1.47$ ). Participants were Caucasian (57%), Asian (23%), African American (7%), Latino (7%), and 6% of other ethnic backgrounds. The majority of participants indicated that they were either Catholic (39%) or Protestant (10%). An additional 8% indicated that they were Jewish, whereas 4% identified themselves as Muslims; 11% of the sample described themselves as being atheist or agnostic. The remainder of the sample (27%) indicated "other" as their religious preference.

Participants were provided with the following instructions:

In a previous study, we asked people to tell us their views of forgiveness. Specifically, we asked them to "list the characteristics or attributes of forgiveness that come to mind." Below are the responses of some of the people in our earlier study. Please read each of the descriptions of forgiveness below. After you have read each one, please rate how central or important you think each of the features are to the concept of forgiveness.

Participants then rated how well each of the 78 forgiveness features obtained from Study 1 characterized the experience of forgiveness by using a scale ranging from 1 (*extremely poor feature of forgiveness*) to 8 (*extremely good feature of forgiveness*). For half of the participants, the 78 features were presented in reverse order.

#### Results

Mean centrality ratings for the 78 features are listed in Table 1. Two indices provided evidence for the reliability of these means. First, the intraclass correlation coefficient was computed, which is equivalent to the mean of all possible split-half correlations of the 137 judges with respect to the 78 features ( $ICC = .94$ ,  $p < .001$ ). Further analyses, based on a flipped data matrix and treating the 78 features as cases and the 137 participants as items, show that the internal consistency of the ratings is exceptionally high ( $\alpha = .99$ ).

A comparison of the mean centrality ratings with the frequencies from Study 1 indicated that some features were both listed frequently and given high centrality ratings (e.g., understanding and an act of love). However, other frequently listed features, such as forgetting the incident, were given relatively low centrality ratings. Therefore, the resulting correlation between frequency and centrality was low ( $r = .17$ ,  $p > .10$ ). Centrality was, however, significantly correlated with how positively par-

ticipants viewed each feature ( $r = .823, p < .001$ ). Central features were rated more positively than were peripheral features.

Univariate ANOVAs were conducted to examine if there were differences in mean centrality ratings as a function of gender, ethnicity (White vs. non-White), and religion (named vs. atheist/agnostic vs. other). Results indicated that men and women differed on 12 features. For all of these features, mean centrality ratings made by women lie above those given by men. Takes time, letting it go, talking things out, sincerity, letting go of anger, having peace of mind, not wanting revenge, learning from mistakes, doing the right thing, focusing on the good instead of the bad, generosity, and nice were all features that more women regard as more important than men. There were five significant racial differences observed. Happens between friends and difficult to do were two features that more White participants regarded as more important. On the other hand, non-White participants view other features, such as understanding, open-minded, and nice as more central than do White participants. There was only one religion difference observed. Not surprisingly, atheists/agnostics rated the feature religious act as less important than participants of named or other religions. These gender and racial differences were statistically controlled in all the analyses that follow.

Because these features were intended for use in the following studies, it was necessary to decide which features should be considered central and which should be regarded as peripheral. On the basis of a median split of the centrality ratings, features with a mean centrality of 6.13 or higher were considered central. The remaining 39 items were considered peripheral. It should be noted, however, that this division of features is not meant to imply that there is a clear line demarcating central and peripheral features. Rather, centrality is considered to be a continuum.

### *Discussion*

The first important finding of these data is that participants considered some features to be more prototypical of forgiveness than others. Moreover, they agreed on these ratings. The fact that participants found this to be a meaningful task fulfills the first criterion for demonstrating that a concept is prototypically organized.

Another important finding was that feature centrality was associated with how positively participants viewed each feature. This suggests that positive features are considered to be more representative of forgiveness than are negative ones. The correlation between frequency and centrality, however, was low but is consistent

with results found in other prototype analyses (Fehr & Russell, 1984; Hassebrauck, 1997). This finding implies that the most readily recalled features are not necessarily the most central. It has been proposed that frequency and centrality measure different aspects of internal structure (Hassebrauck, 1997). When individuals are asked to freely recall the forgiveness features, both positive and negative features readily come to mind. It is possible that during the free-listing task participants used a "what comes to mind first is appropriate" heuristic. The typicality ratings, however, likely require more systematic processing of information. This suggests that even though people report that these negative components are not good indicators of forgiveness when given time to critically evaluate them, they still incorporate them into the prototype of forgiveness when they are processing less systematically.

### STUDY 3:

#### RECALL AND RECOGNITION MEMORY FOR FORGIVENESS STATEMENTS

If forgiveness is prototypically organized, then this structure should affect cognition. More specifically, we propose that this prototypic structure should affect performance on both recognition and recall memory tasks. Activation of a prototype causes features closely associated with that prototype to be more easily accessible in memory than features that are not as closely associated (Cantor & Mischel, 1979). For example, in a recognition memory task, Cantor and Mischel (1977) showed that participants presented with four descriptions of an extrovert, an introvert, and two control persons demonstrated a bias toward recognizing nonpresented but highly related features of the introvert and extravert characters. Similarly, in a study of recall memory, Cantor and Mischel (1979) found that the most information was written and recalled for characters composed of prototype-consistent attributes.

The purpose of Study 3 was to investigate both recognition and recall memory in a single experiment. We proposed that when the forgiveness prototype is activated, it would be difficult for participants to distinguish between central features of forgiveness that were presented during an acquisition phase and other central features of forgiveness that were not presented but are closely associated with the concept. Peripheral features, however, should be much easier to distinguish because they are less closely associated with forgiveness. Therefore, because central features should be more salient in memory than peripheral features, we expected that participants would correctly recognize and recall more cen-



tral features of forgiveness. In addition, we predicted that participants also should be more likely to falsely recognize and recall more central features.

### *Method*

#### *PARTICIPANTS*

Participants included 47 psychology students (19 men, 28 women) drawn from three undergraduate psychology classes. The sample was predominately Caucasian (66%), whereas the remaining participants were African American (13%), Asian (13%), Latino (2%), and 6% of participants were of other ethnic backgrounds. Participants ranged in age from 18 to 44 years ( $M = 24.74$ ,  $SD = 6.83$ ).

#### *PROCEDURE*

Participants viewed a series of slides that were presented with a projector on a screen in the front of the classroom using Microsoft PowerPoint (acquisition phase). Each slide contained one forgiveness statement and was presented for 4 s. Participants were instructed to pay attention to the slides because they would be asked some questions about them later in the experiment.

The forgiveness statements were constructed by randomly selecting 20 of the peripheral features and 20 of the central features that were obtained in Study 2. These features were inserted into the following framework: "Forgiveness is \_\_\_\_\_" (e.g., acceptance) to create the statements. In some cases, slight modifications were made to create grammatically correct sentences. These statements were randomly divided into two groups with each group composed of 10 central and 10 peripheral statements. Therefore, some participants received one set of 20 statements (Group 1), whereas others received a different set of 20 statements (Group 2). The mean centralities for Group 1's central and peripheral features were 6.55 and 4.41, respectively. The mean centralities for Group 2's central and peripheral features were 6.58 and 4.57, respectively. Each group of participants viewed the statements in a different random order.

After viewing the forgiveness statements, participants engaged in an interference task. They were asked to list, in 4 min, in alphabetical order, as many of the states in the United States as possible. Next, participants were instructed to recall, in 3 min, as many of the forgiveness statements as possible. They were given a blank sheet of paper to write down all of the statements that they could remember.

Finally, participants completed the recognition task. Each participant was presented with the same set of 40 statements. This set of statements consisted of the 20

statements that participants had viewed during the acquisition phase as well as the 20 statements that were presented to the other half of the participants. Therefore, each participant was exposed to 20 statements that he or she had previously seen and 20 sentences that he or she had not previously seen. For each statement, participants were asked to indicate whether they had seen the statement during the acquisition segment.

### *Results*

The data were analyzed in a series of mixed ANCOVAs with group (A or B), gender (male or female), and ethnicity (White or non-White) as between-subjects variables and attribute (central or peripheral) as the within-subjects variable. Because centrality and positivity are highly correlated, we also included a covariate in these analyses that controlled for the positivity of the features. This covariate was constructed by first computing an average valence for the number of features correctly or falsely recalled or recognized. A difference score was then computed between the average valence of the central and peripheral features in each condition (e.g., for correct recognition, the covariate was computed by subtracting the mean valence of the peripheral features that were correctly recognized from the mean valence of the central features correctly recognized. This covariate was computed for each participant.

#### *RECALL MEMORY*

Participants were asked to list as many of the forgiveness statements that they could remember. Two judges coded each of the participant's responses. All judgments were very straightforward. There were no cases where judges disagreed on whether a participant's response corresponded with what had been presented. Items that were recalled that were not part of the forgiveness prototype were omitted from the analyses. Four scores were computed for each participant: the numbers of central and peripheral features correctly recalled and the numbers of central and peripheral features falsely recalled.

Our first prediction was that for the presented items, central features would be correctly recalled more often than would peripheral features. However, the main effect for attribute was not significant,  $F(1, 38) = 2.61$ ,  $ns$ ). Participants correctly identified a mean of 2.61 of the 10 central features and 2.40 of the peripheral features that they had seen. There were also no other significant main effects or interactions for correct recall. Our second hypothesis was that central features that had not been presented during the acquisition phase would be falsely recalled more often than would peripheral ones. Contrary to our expectations, the main effect of attrib-

ute was not significant,  $F(1, 38) = .43, ns$ ). Participants falsely recalled a mean of .12 central features and .10 peripheral features. There were no other significant main effects or interactions for false recall.

#### RECOGNITION MEMORY

Our first prediction was that for the presented items, central features would be correctly recognized more often than would peripheral features. As expected, a significant main effect for attribute was obtained,  $F(1, 38) = 5.96, p < .05$ . An average of 7.68 of the 10 central features were correctly recognized, compared with 6.61 peripheral features. There were no other significant main effects and no significant interactions. Our second hypothesis was that central features that were not presented during the acquisition phase would be falsely recognized more often than would peripheral ones. As predicted, a significant main effect for attribute was obtained,  $F(1, 38) = 10.98, p < .01$ . An average of 3.36 of the 10 central features were correctly recognized, compared with 2.17 peripheral features. The percentage of participants falsely recognizing each feature and the mean centrality rating of each feature (obtained in Study 2) were also positively related ( $r = .386, p < .05$ ), indicating that false recognition of features increased along with increases in feature centrality. No other effects were significant.

#### Discussion

Results from this study provide evidence that fulfills the second criteria for demonstrating that forgiveness is prototypically organized; centrality of the forgiveness features affects cognition with respect to forgiveness. Participants both correctly recognized and falsely recognized more central features of forgiveness. It appears that when participants were presented with the forgiveness features, the concept itself was activated. The concept then acted as an organizing principle for processing further material, resulting in a bias toward recognizing nonpresented but highly related features of the concept.

Contrary to our predictions, we found that feature centrality did not affect recall memory. The number of central features falsely recalled was not significantly different from the number of peripheral features falsely recalled. This may be because recognition of an item requires a lower threshold of strength than does recall, making recognition of an item easier (Kintsch, 1970). During recall, an item is first retrieved from memory by the search process. It is then tested by the recognition process, which determines if it is from the to-be-recalled list. Therefore, for an item to be recalled, it must be both successfully retrieved and recognized. Consistent with

this explanation, we observed that participants were unable to recall many of the forgiveness features, either central or peripheral. Participants correctly recalled less than 30% of the features that they had seen, both central and peripheral. Of the items that they recalled, participants rarely included items that were not presented, resulting in less than one feature on average being generated, either central or peripheral.

#### STUDY 4:

#### RECALL AND RECOGNITION MEMORY FOR A FORGIVENESS NARRATIVE

The goals of Study 4 were similar to those of the previous study. However, in this study, we used a forgiveness narrative rather than forgiveness statements. Participants read a narrative describing a transgression between two roommates at the university. Six central and six peripheral forgiveness features were incorporated in the narrative. We hypothesized that when participants were asked to rewrite the narrative, they would incorrectly include more central than peripheral features. In addition, we proposed that central features that were not presented within the narrative would be falsely recognized more often than peripheral ones that were not presented.

#### Method

##### PARTICIPANTS

Participants included 123 introductory psychology students (71 men, 52 women). The mean age of participants was 20.82. 62% of the sample was Caucasian, 12% was African American, 18% was Asian, 1% was Latino, and 3% were of other ethnic backgrounds. The majority of participants were either Catholic (29%) or Protestant (20%). An additional 3% indicated that they were Jewish, whereas 2% identified themselves as Muslims; 14% of the sample described themselves as being atheist or agnostic. The remainder of the sample (32%) indicated "other" as their religious preference.

##### PROCEDURE

Participants read a narrative depicting a transgression between two roommates at the university (see Appendix A). They were told that they would be asked a few questions about the story later in the experiment. The narrative described the transgression in detail as well as what happened after the transgression. Within this narrative, we incorporated six central and six peripheral forgiveness features (see Appendix A). We chose a variety of features from each centrality category so that their average centrality would be representative of that category and at

the same time would make sense in the context of the narrative. The average centrality ratings of the central and peripheral features that were incorporated into the narrative were 6.53 and 4.92, respectively.

Participants then engaged in the same interference task as in Study 3. Next, they completed the recall segment of the experiment. Participants were asked to rewrite the narrative as they remembered it happening. They were told to be as accurate as possible regarding the story details and to try not to make any mistakes. They were given as much time as they needed to complete this task.

Finally, participants completed the recognition task. They were asked to indicate whether various events had occurred in the transgression narrative. The events consisted of the 12 forgiveness features that had been presented in the narrative (6 central, 6 peripheral) as well as 12 forgiveness features that had not been presented (6 central, 6 peripheral). Participants were instructed to circle "yes" if they believed that the event had occurred or to circle "no" if they believed that the event had not occurred.

### Results

The data were analyzed in a series of mixed ANCOVAs with gender (male or female) and ethnicity (White or non-White) as between-subjects variables and attribute (central or peripheral) as the within-subjects variable. As in Study 3, we also included valence as a covariate to control for the positivity of the features.

#### RECALL MEMORY

Two judges coded each of the participant's narratives for the presence or absence of each of the 78 attributes that were identified in Study 1. Cohen's kappa across the 78 attributes ranged from  $-.015$  to  $1.0$  ( $M$  across items =  $.768$ ,  $Mdn$   $\kappa$  across items =  $1.0$ ). Four scores were then computed for each participant: the numbers of central and peripheral features correctly recalled and the numbers of central and peripheral features falsely recalled.

Our first prediction was that for the presented items, central features would be correctly recalled more often than peripheral features. However, the main effect for attribute was not significant,  $F(1, 118) = .042$ , *ns*. Participants correctly identified a mean of 1.73 of the 10 central features and 1.60 of the peripheral features that they had seen. There were no other significant main effects or interactions for correct recall. Our second hypothesis was that central features that were not presented within the narrative but had been generated in Study 1 would be falsely recalled more often than peripheral ones. Contrary to our expectations, participants falsely

recalled more peripheral ( $M = 2.25$ ) than central ( $M = .67$ ) features,  $F(1, 118) = 241.40$ ,  $p < .001$ . There were also no other significant main effects or interactions for false recall.

#### RECOGNITION MEMORY

Our first prediction was that for the presented items, central features would be correctly recognized more often than peripheral features. As expected, a significant main effect for attribute was obtained,  $F(1, 121) = 120.59$ ,  $p < .001$ . An average of 5.69 of the six central features were correctly recognized, compared with 4.31 peripheral features. There were no other significant main effects and no significant interactions for correct recognition. Our second hypothesis was that central features that were not presented in the narrative would be falsely recognized more often than would peripheral ones. As predicted, a significant main effect for attribute was obtained,  $F(1, 121) = 58.43$ ,  $p < .001$ . An average of 3.25 central features were falsely recognized, compared with 1.47 peripheral features. No other effects were significant.

### Discussion

As in the previous study, we found that the centrality of the forgiveness features affected the way that people thought about forgiveness. Consistent with Study 3, the results supported our predictions for recognition memory with respect to presented features. Participants correctly recognized significantly more central than peripheral features. The false recognition data also strongly supported our predictions. Participants exhibited a bias toward recognizing nonpresented but highly related features of forgiveness.

Findings with regard to recall memory were less clear. When participants were asked to rewrite the transgression narrative, they correctly recalled an equal number of central and peripheral features. However, participants falsely recalled more peripheral than central features. Although this finding was not expected, it should be noted that other prototype researchers also have found inconsistent results in free recall (Fehr, 1988; Hassebrauck, 1997). Both Fehr (1988) and Hassebrauck (1997) found that participants correctly remembered more peripheral than central features of love and relationship quality, respectively.

When we examined the peripheral items that were most commonly falsely incorporated into the narrative, we found that the two most frequently mentioned features were "being angry" and "the perpetrator says they're sorry." These features were closely associated with other elements in the story. For example, the narra-

tive describes that Jessica is very upset with Amy and she yells at her and storms out of the room. It is possible that this could be perceived as “being angry” even though the narrative does not explicitly state this. Similarly, the narrative describes how Amy gave Jessica a card explaining how much she regrets what she did. Although the narrative does not explicitly state that Amy apologized, it could easily be implied.

It is likely that these two highly related features resulted in this unexpected finding. To examine this possibility, we reran our analyses omitting these two problematic items (being angry and perpetrator apologized). When these items were omitted, we found that participants falsely recalled similar numbers of central ( $M = .64$ ,  $SD = .69$ ) and peripheral ( $M = .56$ ,  $SD = .69$ ) features,  $t(128) = .94$ ,  $p > .05$ .

Overall, results from Studies 3 and 4 support the hypothesis that central features are more salient in memory than peripheral features. It appears, however, that this salience may affect people’s performance on recognition tasks but not on recall tasks. The discrepancy between recall and recognition memory has been a major focus of research (Anderson & Bower, 1973; Kintsch, 1970; Tulving, 1976) because recognition is often found to be superior to recall. One early view, strength theory, explained this discrepancy by arguing that recall of an item requires more information in storage (e.g., memory strength) than recognizing an item (Postman, 1963). The generate-recognize view proposes that recall depends on a two-stage process in which an item is first retrieved from memory and is then followed by a familiarity decision. Recognition memory, however, requires only a familiarity decision (Anderson & Bower, 1973). More recently, the encoding specificity principle has proposed that successful retrieval of an item depends on achieving a match between the information encoded at the time of learning and the information that is available at the time of retrieval. Encoding specificity argues that recall is typically more difficult than recognition because it requires more extensive reinstatement of the learning event (Roediger, Weldon, & Challis, 1989).

It is likely that the recall tasks in these two studies were too difficult because the mean numbers of items both recalled and falsely recalled were rather low. It is also possible that participants were trying to remember the exact statements rather than just the features. This may have discouraged them from writing down anything that they were not certain about, resulting in very poor recall. Others have argued that recall memory tends to be characterized by an intentional and effortful retrieval stage, whereas recognition memory tends to be based on the use of a less intentional and less effortful familiarity heuristic (Raaijmakers & Shiffrin, 1992). Perhaps the rec-

ognition task was easier for participants to complete because they only needed to determine whether something looked familiar, whereas during the recall task they needed to exert a great deal of effort to retrieve the features.

#### STUDY 5: FEATURE CENTRALITY AND PERCEPTIONS OF FORGIVENESS

If central features are more applicable to forgiveness than peripheral features, then the centrality of the features that are used to describe transgressions should influence people’s perceptions about those transgressions. In Study 5, we examined how people’s evaluations of hypothetical transgressions are influenced by feature centrality. For this study, we divided the forgiveness features from Study 1 into three groups based on a tertiary split of the average centrality ratings that were obtained in Study 2. Features with a centrality rating of 6.381 or higher were considered central features, features with a centrality rating between 5.311 and 6.380 were considered mixed features, and features with a centrality rating of 5.310 and lower were considered peripheral features. This resulted in a list of 26 central, 26 mixed, and 26 peripheral features.

We proposed that if central features are more applicable to forgiveness than are peripheral ones, then victims portrayed in transgression vignettes that incorporate central features of forgiveness should be seen as more forgiving and less vengeful than victims portrayed in transgressions that include peripheral features. We hypothesized that victims portrayed in transgressions that included mixed features should receive ratings somewhere in between the ratings for the central and peripheral vignettes.

#### Method

##### PARTICIPANTS

Participants consisted of 93 psychology students (48 men, 45 women) drawn from three undergraduate psychology classes. The mean age of participants was 21.63 years. 61% of the sample was Caucasian, 11% was African American, 16% was Asian, 7% was Latino, and 5% were of other ethnic backgrounds. The majority of the participants were either Catholic (29%) or Protestant (18%). An additional 2% indicated that they were Jewish, whereas 18% of the sample described themselves as being atheist or agnostic. The remainder of the sample (32%) indicated “other” as their religious preference.

TABLE 2: Means Scores Across Conditions (Study 5)

	Feature Centrality			F Statistic
	Central	Mixed	Peripheral	
Forgiving	117.69 (1.99) <sub>a</sub>	111.08 (2.97) <sub>b</sub>	106.49 (26.54) <sub>b</sub>	7.86 (2, 178)**
Vengeful	28.41 (2.49) <sub>a</sub>	36.41 (2.87) <sub>b</sub>	39.00 (3.07) <sub>b</sub>	13.26 (2, 180)***

NOTE: Means with different subscripts are significantly different.

\*\* $p < .01$ . \*\*\* $p < .001$ .

#### PROCEDURE

Participants read three vignettes depicting three different hypothetical transgressions. One vignette incorporated four central features of forgiveness, one incorporated four peripheral features, and one incorporated four mixed features. The average centrality of the central, mixed, and peripheral features were 6.78, 5.87, and 3.49, respectively. The vignettes were counterbalanced so that the features (central, peripheral, mixed) appeared equally frequently with the three different transgressions. This resulted in three conditions with 31 participants in each condition (see Appendix B). The order in which the vignettes were presented within each condition also was randomized to control for order effects.

After reading each vignette, participants were asked to rate (a) how forgiving is the victim and (b) how vengeful is the victim, using a line scale with the endpoints ranging from *not at all* to *extremely*. Participants were instructed to place a slash mark on the line in the position that best indicated their response to the question. Participants' scores on these variables were computed by measuring, in millimeters, the distance from the scale's left endpoint to the participant's slash mark (range: 0-138).

#### Results

To assess the impact of feature centrality on participants' perceptions of the victim, we used the general linear model (GLM) general factorial procedure with repeated measures (see Table 2). Centrality was entered as a within-subjects factor and condition (A, B, or C), gender (male or female), and ethnicity (White or non-White) were entered as between-subjects factors.

First, we examined the effect of centrality on participants' estimates of how forgiving the victim was. The sphericity assumption was not met for this analysis,  $W(2) = .91$ ,  $p < .05$ , so the Huynh-Feldt correction was applied. Using the Huynh-Feldt correction, the main effect of centrality was significant,  $F(2, 78) = 8.36$ ,  $p < .01$ . Post hoc comparisons were performed using the Bonferroni adjustment for multiple comparisons. Results indicated that participants rated victims as more forgiving when they were involved in a transgression that

included central features of forgiveness ( $M = 117.69$ ,  $SE = 1.99$ ). There were no differences between the mixed ( $M = 111.08$ ,  $SE = 2.97$ ) and peripheral conditions ( $M = 106.49$ ,  $SE = 2.87$ ) but both significantly differed from the central condition. There were no other significant main effects or interactions.

Next, we examined the effect of centrality on participants' estimates of how vengeful the victim was. The sphericity assumption was met for this analysis,  $W(2) = .93$ ,  $p > .054$ . As expected, the main effect of centrality was significant,  $F(2, 79) = 12.64$ ,  $p < .001$ . Post hoc comparisons were performed using the Bonferroni adjustment for multiple comparisons. Results indicated that participants rated victims as less vengeful when they were involved in a transgression that included central features of forgiveness ( $M = 28.41$ ,  $SE = 2.49$ ). There were no differences between the mixed ( $M = 36.41$ ,  $SE = 2.87$ ) and peripheral conditions ( $M = 39.00$ ,  $SE = 3.07$ ) but both significantly differed from the central condition. There were no other significant main effects or interactions.

#### Discussion

These findings provide additional support for the proposition that the structure of the forgiveness prototype affects cognition. When central features of forgiveness were incorporated into the description of a transgression, participants rated victims as more forgiving and less vengeful than when the transgressions incorporated either mixed or peripheral features. These findings suggest that people may be more likely to use central features when attempting to gauge levels of forgiveness in transgression situations. Although both central and peripheral features are descriptive of forgiveness, it is likely that individuals rely on central features of forgiveness when attempting to gauge their level of forgiveness toward an offending partner. Similarly, it is likely that when people have transgressed against another, they look for central features when attempting to determine if they have been forgiven. Given the importance of forgiveness in interpersonal relationships, being able to determine when someone has forgiven you could probably be considered an important skill.

A clear limitation of this study is the reliance on imagined scenarios. Although research shows that individuals' responses to hypothetical scenarios often correspond to how they would react in similar, real-life situations, it is possible that these hypothetical scenarios may not correspond to how people would respond in their own relationships. An important extension of this work would involve collecting data from participants who have experienced actual transgressions and examining the features of those transgressions in relation to the amount of forgiveness that has occurred.

#### GENERAL DISCUSSION

The primary purpose of the current studies was to examine the content and the structure of the concept of forgiveness from the perspective of the layperson. Overall, the results of this series of studies provide support for the idea that people have and use a prototype for forgiveness. We found that forgiveness has an internal structure and meets the two criteria for prototypic organization. More specifically, participants made meaningful and reliable decisions about the degree to which various features are central (important or essential) or peripheral (less important or essential) to their understanding of the concept of forgiveness. In addition, feature centrality affected the way that participants processed information about forgiveness. In two studies (Studies 3 and 4), activating the forgiveness prototype made it more difficult to accurately differentiate between presented and nonpresented central features; participants incorrectly recognized more central than peripheral features of forgiveness. Finally, in an additional study (Study 5), feature centrality influenced people's perceptions about hypothetical transgressions. When central features of forgiveness were incorporated into the description of a transgression, participants rated the victims as more forgiving and less vengeful. Taken together, these results provide support for the idea that people have and use a prototype for forgiveness.

#### *Do Laypersons' Conceptualizations Correspond to Existing Theoretical Approaches?*

This is one of the first studies to examine systematically laypersons' understanding of forgiveness. As such, it plays an important role in allowing us to determine whether laypersons' conceptualizations of forgiveness correspond to existing theoretical and scientific approaches to the construct.

The current findings showed that in some ways, participants conceptualized forgiveness in a similar manner to that of forgiveness researchers. For example, many of the existing scientific definitions of forgiveness seem to

be built on one general, core feature: When people forgive, their response toward the person who offended them or injured them becomes less negative. For example, McCullough and colleagues (1998) propose that the essence of forgiveness involves reductions in two interpersonal motivations: (a) the motivation to avoid the offender and (b) the motivation to seek revenge. Consistent with this view, we found that features such as not holding a grudge, making peace between two people, not wanting or seeking revenge, and an end to fighting were all considered central features of forgiveness.

Enright and The Human Development Study Group (1991) highlight the importance of considering the multidimensional nature of forgiveness when attempting to define the construct. They propose that when a person forgives, changes occur in affective, cognitive, and behavioral systems. For example, negative emotions, such as anger, hatred, resentment, and sadness, are given up and are replaced with more neutral emotions and eventually positive affect. In the cognitive system, one ceases condemning judgments and the planning of revenge and instead positive thoughts emerge toward the other, such as wishing him or her well and viewing him or her respectfully as a moral equal. In the behavioral realm, one ceases to act out of revenge and is willing to join in a "loving community" with the other that may involve taking steps in that direction.

Consistent with this view, we found that laypeople do conceptualize forgiveness as a multidimensional construct that includes cognitive, affective, and behavioral components. For example, participants listed many affective forgiveness features, such as kindness, compassion, tolerance, sadness, hurt, and fear. They also listed behavioral components, such as communication, accepting someone's apology, and hugging. Cognitive activities also seem to play an important role in how people conceptualize forgiveness. Participants listed features such as understanding that everyone makes mistakes and realizing that the relationship is too important not to forgive.

Although, as evidenced above, there was overlap between experts' and laypersons' conceptualizations of forgiveness, there were also substantial differences. Most researchers tend to agree on what forgiveness is not, but it seems that ordinary people may not agree with the experts' views. For example, most researchers argue that forgiveness is not condoning, which implies overlooking the offense, or excusing, which implies that the offender had a good reason for what they did (Fincham, 2000). In this study, however, 12% of participants listed condoning or excusing as an attribute of forgiveness. Furthermore, some participants rated this as being a central feature of forgiveness. Researchers also have argued that forgiveness does not mean that you forget about the incident or

deny that pain has been incurred. On the contrary, acknowledging that one has been wronged and has a right to better treatment is critical to forgiveness. However, we found that almost 28% of the participants believed that forgetting about the offense was an important component of forgiveness. This is perhaps not at all surprising given common sayings such as “forgive and forget.” It was not, however, rated as a central feature of forgiveness.

Most important, researchers have persistently argued that forgiveness is not the same as reconciliation, which implies the restoration of the relationship (Enright & Coyle, 1998; Enright, Freedman, & Rique, 1998; Freedman, 1998). Forgiving is widely accepted in the literature as an interpersonal process in which the victim engages, whereas reconciliation is viewed as a dyadic process involving the behavior of two people. Our results indicate, however, that approximately 21% of participants thought that reconciling or bringing the person back into the victim’s life was an important feature of forgiveness. Participants also frequently listed other features indicative of reconciliation, such as realizing the relationship is too important not to forgive and giving someone a second chance. Moreover, all three of these attributes were considered central features of forgiveness. These results are consistent with the work of Kantz (2000) and suggest that for laypeople, reconciliation is viewed as an important part of forgiveness. If individuals believe that they must continue a relationship with an offending party to forgive, then they may be less likely to forgive. This has important implications for forgiveness interventions and highlights the necessity of educating people about what forgiveness is and is not.

Although a small minority of forgiveness researchers have discussed the potential negative or “dark side” of forgiveness (e.g., Baumeister, Exline, & Sommer, 1998), most view forgiveness positively and focus their attention on the potential benefits of forgiving (e.g., Coyle & Enright, 1997; Witvliet et al., 2001). We found, however, that laypeople believed that there were negative aspects involved in the forgiveness process. Participants listed features such as feelings of weakness or of being a pushover, giving the person permission to hurt you again, and swallowing your pride. The finding that laypeople see forgiveness as having negative features is important because this is a component that has not been stressed in most forgiveness intervention programs. Indeed, a potential downside to forgiveness has received limited research attention. The current results emphasize the importance of educating people about what forgiveness entails and addressing the negative notions that people have about it.

*How Can a Prototype Analysis of Lay Conceptions of Forgiveness Inform Forgiveness Research?*

Researchers have offered a number of definitions in an attempt to outline what is and what is not to be included under the term *forgiveness*. Although the current findings indicated that there is some overlap between lay conceptions of forgiveness and scientific accounts, they also indicate that there are substantial differences. This raises the issue of what the relationship should be between lay conceptions and scientific definitions. Stated differently, how can lay conceptions of forgiveness contribute to theory and research about forgiveness?

As Fehr and Russell (1991) elegantly point out, there are a number of possible answers to this question. First, at one extreme would be the position that lay conceptions of forgiveness are irrelevant to science and therefore should be ignored. At the other extreme is the position that lay conceptions of forgiveness are essential to the scientific study of forgiveness. Finally, a middle position between these two extremes is that the scientific analysis depends on everyday concepts, which can tidy up, organize, and improve these concepts.

As stated earlier, we do not mean to imply that forgiveness cannot be defined and we do not propose that lay conceptions of forgiveness must map onto experts’ conceptions. Moreover, we are not suggesting that the scientific study of forgiveness must rely on lay conceptions to truly understand the concept. Rather, we propose that utilizing prototype theory to understand lay conceptions can help advance the scientific study of forgiveness.

Consistent with the views of Fehr and Russell (1991), we propose that there are two main goals of forgiveness research (to capture the meaning of forgiveness as people understand it and to provide a conceptual framework for the scientific study of forgiveness) and that these two goals may require different types of analyses. A descriptive analysis aims to describe the everyday conception of forgiveness, whereas a prescriptive analysis aims to prescribe a conceptualization of those phenomena referred to by the word *forgiveness*. Therefore, a descriptive analysis concerns the concept, not the event, of forgiveness, whereas a prescriptive analysis concerns those events referred to by the word *forgiveness*.

Based on this differentiation, the prototype analysis that is discussed in this article is a descriptive analysis of the everyday concept of forgiveness. Therefore, how can this descriptive analysis contribute to the scientific, or prescriptive, analysis of forgiveness? Drawing on the ideas of Fehr and Russell (1991), we propose that there are several ways that a prototype analysis of forgiveness

can indirectly contribute to the theory and research on forgiveness. First, it is possible that the lay conception of forgiveness plays a causal role in the events of forgiveness. For example, if an individual believes that reconciliation is a necessary component of forgiveness (even though the experts disagree), he or she may be less likely to forgive in situations in which he or she have been transgressed against. If this is the case, then it can be argued that a prescriptive analysis (e.g., predicting forgiveness) requires an adequate descriptive analysis (e.g., understanding lay conceptions of forgiveness). A second possibility is that lay conceptions and beliefs about forgiveness have the potential to provide hypotheses to be tested. For example, one might argue that different features of forgiveness may be associated with different consequences of forgiving (e.g., decreased anger, improved relationships, improved psychological well-being). Finally, the analysis of lay conceptions of forgiveness may help to free researchers from hidden assumptions and confusion that currently exist in the forgiveness literature.

#### *Limitations and Suggestions for Future Research*

Some limitations of the current research should be noted. First, these studies focused on the content of general forgiveness as described by college-educated, young adults. The majority of the participants in our studies were Caucasian and Christian. It is possible that the forgiveness prototype may change as a function of other individual difference factors, such as age, religious background, or culture. Although there is little cross-cultural data on forgiveness, it is possible that whether an individual is from an individualistic or collectivistic culture could influence his or her understanding of forgiveness.

It is also possible that the prototype may differ across different types of transgressions. More specifically, people may conceptualize forgiveness differently in the context of severe transgressions as compared to minor transgressions. People also may think of forgiveness differently depending on their role in the transgression (e.g., perpetrator vs. victim). Forgiveness also may be conceptualized differently in the context of different types of relationships. For example, forgiveness between a mother and a child may be very different from forgiveness between romantic partners. Similarly, forgiveness of infidelity in a long-term marriage may not be the same as forgiveness in adolescent dating.

Future research should examine the stability of the forgiveness prototype across different situations, across different relationship types, and across different types of

transgressions. Another promising direction for future research is to examine prototypical forgiveness types. Finally, the current research examined how people conceptualize forgiveness in general. It would be useful to utilize a prototype perspective to examine people's conceptualizations of forgiveness within the context of actual transgressions.

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#### APPENDIX A

Jessica and Amy are roommates here at the university. Jessica is currently trying to get into the occupational therapy program. She has been working hard for the last 2 years to make sure that she received good grades in all of her prerequisite classes. She believes that her hard work has paid off and that she has everything she needs to make her a good candidate for the program. The last thing that she needs to do is give in her application, which is due by 5:00 today. Jessica has just finished filling out her application and is getting ready to bring it over to the department when Amy comes home from class. She talks with Amy for a few minutes and Amy offers to drop the application off for her since she's going to be going right by the department when she goes to her next class. Since Jessica is in a hurry to get to work, she gratefully accepts Amy's offer. Jessica tells Amy how important it is that the application gets to the department before the 5:00 deadline.

A week later, Jessica gets a letter from the occupational therapy department saying that her application could not be considered for the upcoming semester because it was received after the deadline and that they have a very strict policy about this. When Jessica asks Amy about this, Amy tells her that she had met an old friend, went to lunch instead of going to class, and lost track of time. When she remembered the application, it was already past 5:00. However, she figured that it wasn't a big deal since deadlines usually aren't that strictly enforced. Therefore, she waited until the next morning to drop off the application.

Jessica is very upset with Amy for what she has done. She yells to Amy "How could you be so irresponsible? You knew how important this application was to me and I trusted you to drop it off on time. Thanks to you, I have to wait another semester to apply to the program." In tears, Amy replies, "I just forgot. I didn't mean to do it, I just lost track of time." Jessica storms out of the room. For the next few days, Jessica avoids Amy. She tries not to be in the room when she knows that Amy will be there. When they are in the room together, she gives Amy the cold shoulder and refuses to look at her or speak to her.

About a week later, Jessica comes home from biology lab and finds a *box of chocolates (P)* sitting on her bed. Attached to the chocolates is a card. At first, Jessica assumes that the candy must be from her boyfriend, Jason, since he knows how stressed out she's been lately. However, when Jessica opens up the envelope, she sees that the candy is from Amy. The card explains that she didn't mean to do what she did. It's obvious that *Amy regrets what she did (C)*. As Jessica reads the card, she *begins to have*



*sympathy for Amy (P)*. After all, she must be feeling really bad about what she did. In frustration, Jessica throws the box of candy on her desk and decides to go jogging.

As she's jogging, she can't stop thinking about the fight with Amy. After *thinking about things (C)* for a while, she *realizes that everyone makes mistakes (C)* and that she may have been too hard on Amy. After all, *they are friends (P)*. Although she *questions if she's making the right decision (P)*, she decides that she is going to *give Amy a second chance (C)*.

When Jessica gets back from jogging she decides to take a shower while she waits for Amy to get home. About an hour later, Amy walks in the door. When she sees that Jessica is there, she starts to leave. Jessica stops her and says, "Could you please stay, I really want to talk to you." "Of course," Amy replies, "I hate not talking to you." The two girls sit down on their beds and *have a long conversation (C)* about what happened.

At first Jessica is hesitant to forgive Amy but she sees how upset Amy is. Eventually, *Jessica tells Amy that what she did was okay (P)*. "Okay," says Jessica, "now that this *fighting is finally over (C)*, I have to get some studying done. I have a big test tomorrow. I've been so upset by all of this fighting that I haven't been able to study all week." After *sharing a big hug (P)*, the two girls laugh and go about their studying.

NOTE: C = central feature, P = peripheral feature.

## APPENDIX B

### Condition A

#### Central

Sally shared some embarrassing personal information with her friend Lucy who promised to keep the information confidential. However, Lucy breaks the promise and proceeds to tell several people. Sally, however, *realizes that everyone makes mistakes*. She decides to *do the right thing*. She *gives Lucy a second chance*. Sally *accepts Lucy's apology*.

#### Mixed

Laura finds out that her friend Anne has been talking about her behind her back. When she confronts Anne, she denies it even though Laura knows that she is lying. Laura, however, still *wants to be friends* with Anne. She decides to *be the bigger person*. Laura decides to *let the incident go*. Afterward, she *feels relieved*.

#### Peripheral

Sara finds out that her friend Kim secretly went out with a guy even though Kim knew that Sara liked him. Sara *does not trust* Kim anymore. However, Sara decides to *just give in*. She *pretends that the incident didn't happen*. *Everything continues as normal*.

### Condition B

#### Central Features

Sara finds out that her friend Kim secretly went out with a guy even though Kim knew that Sara liked him. Sara, however,

realizes that *everyone makes mistakes*. She decides to *do the right thing*. She *gives Kim a second chance*. Sara *accepts Kim's apology*.

#### Mixed Features

Sally shared some embarrassing personal information with her friend Lucy who promised to keep the information confidential. However, Lucy breaks the promise and proceeds to tell several people. Sally, however, still *wants to be friends* with Lucy. She decides to *be the bigger person*. Sally decides to *let the incident go*. Afterward, she *feels relieved*.

#### Peripheral Features

Laura finds out that her friend Anne has been talking about her behind her back. When she confronts Anne, she denies it even though Laura knows that she is lying. Laura *does not trust* Anne anymore. However, Laura decides to *just give in*. She *pretends that the incident didn't happen*. *Everything continues as normal*.

### Condition C

#### Central Features

Laura finds out that her friend Anne has been talking about her behind her back. When she confronts Anne, she denies it even though Laura knows she is lying. Laura, however, *realizes that everyone makes mistakes*. She decides to *do the right thing*. She *gives Anne a second chance*. Laura *accepts Anne's apology*.

#### Mixed Features

Sara finds out that her friend Kim secretly went out with a guy even though Kim knew that Sara liked him. Sara, however, still *wants to be friends* with Kim. She decides to *be the bigger person*. Sara decides to *let the incident go*. Afterward, she *feels relieved*.

#### Peripheral Features

Sally shared some embarrassing person information with her friend Lucy who promised to keep the information confidential. However, Lucy breaks the promise and proceeds to tell several people. Sally *does not trust* Lucy anymore. However, Sally decides to *just give in*. She *pretends that the incident didn't happen*. *Everything continues as normal*.

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Received March 7, 2003

Revision accepted October 15, 2003