The use of Multidimensional Scaling in the Assessment of College Students' Attitudes toward Organ Donation

by

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To my mother, my rock, and
to Tony, the love of my life

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Abstract

Attitude research in the context of organ and tissue donation has long noted an inconsistency in terms of individuals' attitudes toward donation and the number of registered or card-carrying donors. The present research contends that this inconsistency is due to the measurement procedures used in the existent OTD attitude literature. To test this supposition the most commonly used OTD attitude scale, which dated back to Goodmonson and Glaudin (1971) and utilized Likert-type scaling, was pitted against metric multidimensional scaling procedures. Specifically, four studies were carried out to identify the key concepts students used in their cognitions regarding OTD, to determine the relationships among those concepts (i.e., their structure), and to examine the effects of new information on students' concept structure. Qualitative analyses of survey and interview data identified eleven concepts commonly associated with students' thoughts regarding organ donation which were incorporated into a 55-item pair-comparison measure. Multiple logistic and linear regression analyses were used to test the predictive abilities of students' Likert-scaled attitudes. Likert attitudes and age were found to predict students' signing behavior, but neither attitudes nor age, race, or sex successfully predicted students' intentions to become donors. Multidimensional analyses of pair-comparison data were performed to identify underlying dimensions in the data, to generate pictorial representations of students' OTD attitude structures, and to identify structural changes occurring as a result of the acquisition of new knowledge regarding the donation and transplantation processes. Results and implications of attitude measurement choices are discussed in the domain of organ donation. The role of uncertainty in the attitude-behavior link is also discussed.

The use of Multidimensional Scaling in the Assessment of College Students' Attitudes toward Organ Donation

CHAPTER 1: INTRODUCTION

Since its conception in the late 1800's, the attitude construct has maintained a position of stature in the field of social psychology. Its significance is underscored by the volume of research the construct has inspired. A search using the term *attitude* on the major databases (e.g., *JSTOR*, *InfoTrac OneFile*, *ISI Web of Science*) yields thousands of publications investigating the concept in a variety of domains including religion (Hess & Rueb, 2005; Rogers, Malony, Coleman, & Tepper, 2002), abortion (Hess & Rueb, 2005; Strickler & Danigelis, 2002), stereotypes and prejudice (Griffin & Langlois, 2006), Social Security (Yang & Barrett, 2006), and contraception (Jones, 1999).

While specific definitions of the construct are quite varied, ranging from "a mental and neural state of readiness, organized through experience, exerting a directive or dynamic influence upon the individual's response to all objects and situations with which it is related" (Allport, 1967, p. 8) to "a relatively enduring organization of beliefs about an object or situation predisposing one to respond in some referential manner" (Rokeach, 1966, p. 530), there is a general consensus in the scientific community that an attitude, in its most general form, is an evaluation (e.g., positive or negative, good or bad) of a given object (Abelson & Prentice, 1989; Ajzen, 2001; Ajzen & Fishbein, 1977, 1980; Eagly & Chaiken, 1993; Fazio, 1989; Fazio & Zanna, 1981; Smith, 1967). What is still up for debate, however, is the construct's unique effect on behavior.

Inherent in the definitions presented above, as well as others (*cf*. Allport, 1967; Kerlinger, 1967, 1984; LaPiere, 1934), is the notion that an individual's attitudes toward

an object (i.e., person, place, or thing) have a direct effect on his or her behavior toward the object. This point, however, has divided attitude researchers since the mid-1900's. One camp of researchers has found evidence of an attitude-behavior link (Ajzen & Fishbein, 1977, 1980; Davidson & Jaccard, 1979; Fishbein & Ajzen, 1974, 1975; Kim & Hunter, 1993a, b). The other camp has found little or no support of the same (Blumer, 1955; Campbell, 1963, Deutscher, 1966, 1973; Wicker, 1969, 1971). Wicker (1971) even went so far as to suggest discarding the concept altogether.

Attitude researchers have attempted to bridge this divide by offering possible explanations for the conflicting findings. For example, in his review of the attitude-behavior relationship, Seibold (1975) enumerated theoretical, conceptual, and operational issues in attitude research contributing to the attitude-behavior problem. Similarly, Hovland (1959) and Kelman (1974) note differences stemming from the study design (e.g., laboratory versus survey) and Campbell (1963) implicates situational factors (e.g., social norms, face-to-face communication) as culprits for the inconsistent findings in the attitude-behavior relationship. Eagly and Chaiken (1993, p. 158), however, proposed another potential cause for the attitude-behavior inconsistency: "…the size of the correlations between attitudes and behaviors is to a great extent under the investigator's own control. The magnitude of these correlations varies systematically with the characteristics of the measuring instruments used to assess attitudes and behaviors." By Eagly and Chaiken's (1993) account, the diversity of findings can be attributed to the different operationalizations of the attitude construct and its corresponding behavioral act(s).

The explanations offered by Eagly and Chaiken (1993) and Seibold (1975) are at the crux of the current dissertation. It argues that the failure to find a high correspondence of positive attitudes toward organ and tissue donation (OTD) and the current consent rates for deceased donation is a function of the operationalization and measurement of attitudes and behaviors toward OTD commonly used in this line of research. Of specific concern is the measurement of attitudes toward organ donation.

Attitudes Regarding Organ Donation

Efforts to increase organ and tissue donation (OTD) rates have been the driving force behind a growing body of research in the domain of health communication (Birkimer, Barbee, Francis, Berry, Deuser, & Pope, 1994; Cosse & Weisenberger, 2000; Feeley, Marshall, & Reinhart, in press; Feeley & Servoss, 2005; Gibson, 1996; Julka & Marsh, 2005; Kopfman, Smith, Morrison, Massi, & Yoo, 2002; Maloney & Walker, 2000; Marshalll & Feeley, in press; Morgan, Miller, & Arasaratnam, 2002; Radecki & Jaccard, 1997; Smith, Morrison, Kopfman, & Ford, 1994). The need for more dynamic research in organ and tissue donation is best illustrated by the current statistics regarding the transplantation process. According to the Organ Procurement and Transplantation Network (OPTN, 2005), over 27,000 transplants, from more than 14,000 donors, were performed in 2004. However, there are currently over 90,000 candidates awaiting an organ or tissue transplant, of whom approximately 7,000 will die while waiting for a suitable donor (OPTN, 2005). While the number of organ donors has risen over the past few years, the slope of the rise in donors is far less steep than the slope in the number of individuals who need an organ. Thus, research focused on increasing the number of

viable donors is essential to saving or improving the lives of thousands of people each year.

Scholars studying organ and tissue donation (OTD) have focused their attention on the attitude construct in the hopes of alleviating the shortage of donors. If attitudes toward donation increase so should donation and consent rates. Many researchers have noted an association between attitudes toward donation and the act of becoming an organ donor (Alden & Cheung, 2000; Cosse & Weisenberger, 2000; Cosse, Weisenberger, & Taylor, 1997; Dundes & Streiff, 1999; Feeley & Servoss, 2005; Marshall & Feeley, in press; Sanner, 1994). Accordingly, models used to explain the donation process often include the attitude construct as an essential component, such as the Elaboration Likelihood Model (Skumanich & Kintsfather, 1996), the Theory of Reasoned Action (Feeley, in press; Horton & Horton, 1991; Morgan & Miller, 2002; Radjecki & Jaccard, 1997), and the Organ Donor Willingness Model (Kopfman & Smith, 1996; Smith, Kopfman, Massi, Yoo, & Morrison, 2004). These models predict causal relationships between OTD attitudes and intent or willingness to become an organ donor. Thus, it is thought that engendering positive attitudes toward OTD and the transplantation process will lead to increases in individuals' intentions toward becoming an organ donor and, subsequently, in donor rates. Intent to become a donor is typically measured in one of two manners: (1) as an attitude construct (e.g., "I intend to become a donor if eligible"), or (2) whether one has signed or not signed an organ donation card or electronic registry.

Past research has generally reported favorable attitudes toward OTD and the donation process. For example, a longitudinal study of a national campaign for the

promotion of organ donation found highly positive attitudes (mean score of 31.31 out of 40) toward donation across all four years (Cosse & Weisenberger, 2000). Similar results (e.g., mean attitude scores of 6.13 out of 7) were reported by Morgan, Miller, and Arasaratnam (2002). Feeley and Servoss (2005) also reported favorable attitudes toward OTD, as did Marshall and Feeley (in press). In addition, attitudes toward organ donation have proven quite difficult to change. Across four years of OTD campaign research, Cosse and Weisenberger (2000) saw little variation in respondents' attitude scores. Donor rates increased significantly, but attitudes remained favorable and stable. Sanner (1994) also commented on the relative stability of individuals' attitudes regarding organ donation, as respondents' attitudes became more resolute throughout the course of her research. The lack of change in attitudes could merely be a function of the ceiling effect in attitudes toward donation; that is, there is simply little room left to increase one's attitudes.

It is expected that these strong attitudes would be accompanied by high signing rates. Yet, research has found signing rates to range from about 8 to 52 percent of individuals sampled (Cosse & Weisenberger, 2000; Feeley, in press; Feeley & Servoss, 2005; Kopfman, Smith, Morrison, Massi, & Yoo, 2002; Morgan, Miller, & Arasaratnam, 2002; Ryckman, van den Borne, Thornton, & Gold, 2005). The question plaguing OTD researchers is centered on the gap between attitudes toward donation and signing rates: Why don't these highly stable and favorable attitudes toward OTD translate into high signing rates?

Research on the topic has yielded conflicting findings regarding the role of OTD attitudes on signing behavior. Goodmonson and Glaudin (1971) found a moderate

correlation between college students' reported attitudes toward donation and their level of commitment to becoming an organ donor ($r = 0.58$, $p < 0.01$). They concluded that attitudes, at least to a modest extent, predict individuals' behaviors regarding organ donation. Horton and Horton (1991) and Morgan, Miller, and Arasaratnam (2002) also found relationships between OTD attitudes and signing behaviors. In contrast, Feeley and Servoss' (2005) study on college students' intentions to become organ donors concluded that students' knowledge, willingness to discuss the topic of organ donation, and past personal experience with OTD and the donation process predicted signing rates. Although students' attitudes were highly favorable toward OTD ($M = 3.44$, $SD = 0.52$) and correlated with intent and willingness measures, attitudes were not found to predict signing behavior (Feeley & Servoss, 2005). They speculated that the lack of variance in attitudes may have yielded a range restriction effect on the attitude-signing relationship.

One potential explanation for the group of findings is that there exists a ceiling effect in regard to OTD attitudes (Feeley, Marshall, & Reinhart, in press). OTD attitudes simply cannot become any more positive. If this claim is true, future efforts to increase donor rates via attitude change would be exercises in futility. However, the systematic examination of organ donation research presented above suggests that current attitude measures are insufficient, in that they fail to capture the nuances of individuals' attitudes regarding OTD. In fact, research on organ donation attitudes seems to have just scratched the surface of the construct's role in the process by which individuals choose to become organ donors as evidenced by the inconsistent findings presented above. For example, an individual may report highly favorable attitudes toward organ donation

and the donation/transplantation process, as it seems many do, yet still have reservations about the donation process which prevent him or her from becoming a donor (e.g., Feeley & Servoss, 2005). It is also possible for individuals with identical responses to attitude assessment items to be motivated by very different reasons. One individual's favorable attitudes may be the result of past personal experience with OTD and the donation process, while another individual may report a favorable attitude because he or she thinks donation is a good thing, but would never offer their own organs for donation.

Another explanation, one with the potential to explain the inflexibility of OTD attitudes and the inconsistencies found in OTD attitudes and behaviors across the OTD research, points to the measurement system used to assess OTD attitudes and behaviors in the existent research as the source of the problem. The research reported here tests this assumption by comparing the Likert scaling measures traditionally used in OTD research with metric multidimensional scaling procedures. The current study attempts to examine more closely the role of attitudes in individuals' decisions to become organ donors, as the precise assessment of OTD attitudes may be a necessary precursor to changing attitudes in the direction of donation. Not only will these efforts provide a deeper understanding of the process by which one decides to become an organ donor, but the results can be used to inform future health communication campaigns designed to promote organ donation. Moreover, the knowledge generated herein may prove vital to further increasing the number of registered, card-carrying organ donors in the U. S.

CHAPTER 2: THE MEASUREMENT OF ATTITUDES

Procedures used to measure attitudes are, appropriately, as diverse as the conceptualizations of the construct. Bogardus (1967) measured individuals' attitudes toward members of various races using social distances. Thurston (1967) used a discriminative process to measure attitudes regarding militarism, prohibition, and the church (see also Torgerson, 1958). Likert (1967) assessed attitudes toward African Americans on a 5-point scale, ranging from *strongly approve* to *strongly disapprove*. Guttman (1967) used a similar interval scale to assess qualitative measures of attitudes. And, Osgood (1967) compared cultural attitudes in a semantic space.

The most common method of attitude measurement in OTD research is the Likert scale (Likert, 1967). The scales assess attitudes on an ordinal level, prompting respondents to indicate their agreement with a series of statements using some variation of Likert's original 5-point scale (e.g., 1 = *strongly disagree*, 2 = *disagree*, 3 = *neutral*, 4 = *agree*, 5 = *strongly agree*). Each statement is a proposition concerning a belief about a given object (e.g., person, place, or thing). For example, a Likert item commonly found in OTD attitude scales asks respondents to indicate their level of agreement to the statement (Feeley & Servoss, 2005), "I view organ and tissue donation as a natural way to prolong life." The statement is, in effect, an assessment of the respondent's perception of the association between the concept *OTD* (e.g., attitude object) and *natural way to prolong life* (i.e., that the two can be equated). Typically, this research has summed respondents' answers to the scale items to create an average attitude index used in subsequent analyses. OTD research employing these scales (Feeley & Servoss, 2005; Kopfman & Smith, 1996; Marshall & Feeley, in press; Morgan

& Miller, 2002; Morgan, Miller, & Arasaratnam, 2002) has typically adopted the Likert-type questionnaire originally developed by Goodmonson and Glaudin (1971).

The Likert scaling utilized in Goodmonson and Glaudin's (1971) Organ Transplant Attitude Scale (OTAS) was chosen for the high reliabilities the scales yielded. The 5-point, 22-item scale was piloted over a five-day period; an item analysis was used to weed out questions "which did not differentiate between the most extreme groups" (Goodmonson & Glaudin, 1971, p. 175). This scale reported a split-half reliability of .95 and a test-retest reliability of .94.

OTD research employing Goodmonson and Glaudin's (1971) original scale have yielded respectable levels of internal consistency, as well; Cronbach's alpha ranges from .83 (e.g., Feeley & Servoss, 2005) to .93 (e.g., Kopfman & Smith, 1996). Feeley and Servoss (2005) used a 4-point version of the OTAS in the assessment of college students' attitudes toward donation. Logistic regressions were used to test OTD attitudes' ability to predict students' signing behavior. Morgan and Miller (2001, 2002) and Morgan, Miller, and Arasaratnam (2002) extended the OTAS making it a 7-point scale. However, Morgan and associates used a series of one-way ANOVAs (e.g., Morgan and Miller, 2001; $\alpha = .88$) and regression analyses and ANCOVAs (e.g., Morgan, Miller, & Arasaratnam, 2002; $\alpha = .88$) to determine the effect of attitudes toward donation on respondents' behavior toward OTD (e.g., willingness to discuss the topic and intent to sign an organ donor card). Moreover, Skumanich and Kintsfather (1996) remained true to the original OTAS employing a 5-point scale ($\alpha = .91$). They tested a model of message effects on signing behavior using factor analytic procedures and found attitudes to directly influence intent to sign an organ donor card. Kopfman

and Smith (1996) also used a version of the OTAS to test a model of willingness (i.e., intent) to become an organ donor, as did Horton and Horton (1991).

A few OTD researchers diverged from Goodmonson and Glaudin's (1971) OTAS and created their own OTD attitude measure. Like the OTAS, these measures used Likert scaling. Rumsey, Hurford, and Cole's (2003) Organ Donation Attitude Scale (ODAS) consisted of 20 4-point Likert items which were summed and factor analyzed to assess the scale's construct validity. The analysis uncovered three factors: opposing organ donation, approving of organ donation, and potential organ donors. For their purposes, the examination of the effect of religiosity on individuals' attitudes toward donation, the scale proved valid. In addition, the ODAS secured a split-half reliability of .82 and an alpha of .90 (Rumsey, Hurford, & Cole, 2003). They did not assess the ODAS' utility in predicting signing behavior.

Cosse and Weisenberger's (2000) DONATT scale was "developed following traditional scale development procedures" (p. 298). The scale's eight questions were measured on a 5-point Likert scale and summed to create an attitude score (α = . While DONATT scores did not change significantly over the course of the study, signing rates did. The scale may not have had the level of precision needed to detect the changes in attitudes which caused the increase in donors. The authors offer an alternative to this line of reasoning and cautiously attribute the observed increase in donors to the campaign under investigation. Additionally, Alden and Cheung (2000) summed three 7-point Likert-scaled items and seven semantic-differential items to create a composite score of respondents' attitudes toward donation. A logistic regression analysis was used to determine whether attitudes toward organ donation predicted participants' ownership

of a signed organ donor card. They concluded OTD attitudes “are a strong predictor of donor-card possession” (p. 307).

However good these scales may seem to be, a number of limitations are inherent in the use of Likert scaling. For instance, some researchers have criticized Likert scales for the amount of error the scales produce. Woelfel and Fink (1980) contend that while Likert scales may display high reliability, this reliability often comes at cost to precision. Interval scales (e.g., Likert and semantic differentials) are said to incorporate nearly 20% error into the data (Barnett, 1988a; Barnett, Hamlin, & Danowski, 1982; Woelfel & Fink, 1980). These authors further note that the amount of information, in bits, obtained by these crude measures is limited.

In addition, Likert scales only assess attitudes toward an object along one dimension (i.e., good – bad or positive – negative; Abelson, 1967; Barnett and Woelfel, 1979). Typically, Likert scale items are summed and/or averaged to produce one composite indicator of an individual’s attitude toward donation, resulting in the categorization of an individual as being either for or against organ donation. Fishbein (1967b) notes it is the evaluative or affective component of attitudes that Likert scales assess, and that is “treated by researchers as the essence of attitude” (p. 257).

A one dimensional characterization of attitudes is parsimonious, but unlikely. In fact, the multidimensionality of attitudes is widely accepted (Fishbein, 1967b; Katz, 1960; Kerlinger, 1984). Three components, each representing a separate dimension, the affective, cognitive, and conative have been identified (Fishbein, 1967b). And, Katz (1960) defines a variety of additional attitudinal dimensions including, intensity, specificity, and centrality. In addition, Kerlinger’s (1984) research on political ideologies

suggests a two-dimensional attitudinal structure wherein individuals in agreement with belief statements at one end of a dimension (e.g., liberalism) are neutral to belief statements on the other end of the dimension. It is the primary task of the current dissertation to measure the multidimensional attitude structure of individual attitudes toward organ and tissue donation.

A method of attitude assessment that accounts for the multidimensional nature of attitudes is multidimensional scaling (MDS). To date, only one piece of research in the domain of OTD has utilized multidimensional scaling in the study of individuals' perceptions of the topic (Maloney, Hall, & Walker, 2005). Shepard offers a possible reason for OTD researchers' attraction to the Likert method: "the availability of a certain kind of method…can subtly influence an investigator to accept the formal model underlying that method as a substantive model for the phenomenon under study—to the exclusion of other quite different and perhaps more fruitful substantive models" (1972, p. 11). The availability of Goodmonson & Glaudin's (1971) scale, its high reliability, and its growing frequency of use, may have led many researchers to favor its adoption over that of other methods.

Multidimensional Scaling

Multidimensional scaling (MDS) procedures originated in the mid-1900's with the work of a handful of psychometricians and social scientists who were disenchanted with the scaling methods commonly used during that time (Attneave, 1950; Klingberg, 1941; Messick & Abelson; Richardson, 1938; Torgerson, 1952; G. Young & Housholder, 1938). These researchers developed the original MDS model which has since undergone changes to accommodate the needs of subsequent MDS researchers

(Carroll & Chang, 1970; McGee, 1968). The model “is an algebraic equation with a geometric counterpart” (F. Young, 1987). In other words, MDS analyses use a mathematical algorithm to identify the dimensions underlying a given set of data and map up to three of them in a coordinate system.

MDS procedures were first used to distinguish between various gradations of color (Messick, 1956; Richardson, 1938), and have since been applied to environmental issues (Pierce, Colfer, Woelfel, Wadley, & Harwell, 1996), political and organizational communication (Barnett, Serota, & Taylor, 1976; Woelfel, Newton, Kincaid, & Holmes, 1979), and mass communication (Newton, Buck, & Woelfel, 1986; Woelfel & Barnett, 1974).

MDS and Attitudes

MDS models have been classified as either metric or nonmetric. Metric MDS algorithms are based on the assumption that the original dataset was collected using interval or ratio level scaling; whereas nonmetric MDS algorithms analyze data collected on the ordinal level (F. Young, 1987). In Norton’s (1980, p. 309) words,

> Nonmetric multidimensional scaling maps a set of variables (objects, stimuli, people) into a set of points in a metric space such that the variables that are similar by some empirical standard are close neighbors in the space, and variables that are dissimilar are distant neighbors from each other in the space.

In nonmetric MDS, this judgment of similarity is based on the rank ordering of the variables used in the analysis (i.e., ordinal level). Metric MDS is also based on the concept of similarity/dissimilarity; however the empirical standard used differs from that used in nonmetric MDS. Interval and ratio level judgments are mapped as true

distances between the variables; they also allow for the use of a greater variety of statistical procedures. Future use of the acronym MDS will refer to metric MDS only.

The variables Norton (1980) refers to above constitute the set of concepts or objects that make up the domain of thought on a particular topic (Woelfel & Fink, 1980). The set, as a whole, represents an individual's field of experience regarding the topic. Considering organ donation for a moment, individuals with personal experience with the procedure, that is, they or a family member or friend donated an organ or tissue, or were the recipient of an organ/tissue transplant, might have in their repertoire specific terms or concepts describing the transplantation process such as, *organ procurement organization*, *antibody matching*, or *transplant team*; whereas individuals with no direct experience with the process may not have ever been exposed to these concepts. Assuming the concepts included in the set are all part of a given individual's field of experience, the individual's judgments on the degree of similarity between each unique pair of concepts (e.g., for a set of 15 concepts, 105 similarity judgments ([n (n – 1)] / 2) would be required) are a reflection of his or her cognitions regarding the topic (Woelfel & Fink, 1980).

Furthermore, MDS assumes that psychological distances can be measured as physical distances such that "short (psychological) distances would represent (psychological) similarity, or agreement, and long distances would represent dissimilarity, or disagreement" (Abelson, 1967, p.148). To aid in the judgment of the degree of separation (i.e., distance or difference) between the paired concepts, a criterion pair is typically provided with an imposed degree of separation. The criterion pair provides a standard unit of measurement by which all other pairs of concepts are

compared (Woelfel & Fink, 1980). For instance, for a given set of concepts {w, x, y, z} setting a criterion pair of y and z as 100 units apart provides a reference for use in judging the similarity of all other pairs of concepts such that the degree of similarity assigned to concepts w and x is a function of the degree of similarity between y and z (i.e., greater than, less than, twice as great).

In essence, the pair-comparison items ask respondents to evaluate the relationship between two concepts. If the concepts are considered beliefs, then responses to the pair-comparison items differ from those to Likert-scaled questions only on the level of measurement (i.e., ordinal versus interval-ratio). Using organ and tissue donation again as an example, researchers using Likert-type scaling ask respondents to report their level of agreement, on a scale of 1(disagree) to 5 (agree), to statements such as, “I view organ and tissue donation as a benefit to humanity.” The same pair-comparison item, in contrast, solicits an evaluation of the difference between the concepts *OTD* and *benefit to humanity* and allows the respondent the opportunity to report any value he or she finds appropriate. A respondent who equates the two concepts, that is he or she reports the difference between *OTD* and *benefit to humanity* as very small, would also indicate agreement to the question posed in Likert form.

Therefore, the differences (i.e., distances) assigned to paired concepts reflect, not simply the individual’s cognitions, but, more specifically, the individual’s biases regarding the topic – that is, his or her beliefs and attitudes (F. Young, 1987). When a self-referencing term (e.g., me, myself, yourself) is included in the set of concepts a much more precise picture is developed. Evaluations of the degree of similarity between the self-referencing term and other concepts in the set are an indication of the

respondent's attitude toward those concepts (Barnett, 1988a, b; Neuendorf, Kaplowitz, Fink, & Armstrong, 1987; Woelfel & Fink, 1980). Using the parlance of Woelfel and colleagues (Woelfel, Newton, Kincaid, & Holmes, 1979), the "distance from any object and the self is held to be predictive of approach behavior toward the object" (p. 23). As such, small distances between the self-referencing concept and the phrase *organ donation*, for example, would suggest an approach orientation (i.e., positive attitude) toward OTD. Respondents equating the two concepts (e.g., assigning a distance of zero) would theoretically indicate an individual's status as a donor or as an intended donor.

The resulting map of the concepts and their distances in a coordinate system provides a picture of "the structure underlying the interrelationships between a number of objects" (O'Hare, 1980, p. 29), the objects being the set of beliefs associated with the topic (e.g., OTD). This operationalization is consistent with the definition of attitudes offered by Kerlinger (1984): "Attitudes are enduring and organized structures of social beliefs that predispose individuals to think, feel, perceive, and behave selectively toward referents or 'cognitive objects' of attitudes" (p. 5). The number and arrangement (i.e., structure) of an individual's beliefs on a topic influence his or her attitude in regard to the topic, and thus any subsequent action toward the topic or attitude object. This definition emphasizes the structural nature of attitudes, and their relationship to beliefs and behavior, overt or otherwise.

Beliefs. Organ donation researchers operationalize individuals' OTD attitudes in a manner consistent with expectancy-value models (Fishbein, 1963; Peak, 1955). These models conceptualize attitudes as the summative evaluation of beliefs regarding

the attitude object (Eagly & Chaiken, 1993). Many attitude models, in fact, highlight beliefs as the basic building blocks of attitudes. For example, Fishbein (1967a) claims that an attitude is the product of the strength of a belief about the attitude object and the evaluation of the attitude object summed across all beliefs held in regard to a given attitude object. Sherif and colleagues (C. W. Sherif, M. Sherif, & Nebergall, 1965; M. Sherif & Hovland, 1961) advance the notion that an attitude toward an object is a unidimensional representation of one's beliefs regarding the object, such that any and all belief statements in which an individual is in agreement with are said to fall within the individual's latitude of acceptance. The remaining statements, those with which the individual is in disagreement as well as those with which he or she neither agrees nor disagrees, constitute the latitudes of rejection and noncommitment. Additionally, Kerlinger's (1967) definition of an attitude differentiates between an evaluative (e.g., affective) and a descriptive belief. Thus, an individual's system of beliefs concerning a given attitude object help to form his or her overall attitude toward the object.

Beliefs, according to Eagly and Chaiken (1993), are the "associations or linkages that people establish between the attitude object and various attributes" (p. 103). Kerlinger (1984) distinguishes between three types of beliefs: knowledge, faith, and opinion. *Knowledge beliefs*, while not necessarily based in fact, are stated as such; *faith beliefs* demonstrate an individual's blind faith in an attitude object. The difference between the two is simple – knowledge beliefs can be disproven or falsified, whereas faith beliefs cannot (Kerlinger, 1984). The last type of belief, *opinion beliefs*, allow individuals to declare their personal feelings on an issue, event, or person with the understanding that it may be false (Kerlinger, 1984). Other types of beliefs have been

identified as well. Ajzen (1989) compares behavioral (e.g., beliefs concerning the outcome of performing a behavior), normative (e.g., beliefs concerning other peoples' perceptions of an individual performing a behavior), and control beliefs (e.g., beliefs concerning the ability of performing a behavior).

Individuals' beliefs regarding organ donation originate from a number of sources including religion, culture, knowledge, social norms, and ideas regarding altruism (Radecki & Jaccard, 1997). An individual's perception of their religion's stance on OTD is one form of religious belief. Another belief in this category concerns the bodily state needed to be reincarnated or to achieve an afterlife. These may also be considered cultural beliefs (Alden & Cheung, 2000; Cheung, Alden, & Wheeler, 1998). Myths and misperceptions about organ donation and the donation and transplantation process, fall under the heading of knowledge beliefs. These include beliefs that organs go to the highest bidder rather than to those most in need, that organs are bought and sold on the black market, and that medical professionals do not work as hard to save organ donors, among others (Transweb, 2000; see also Sanner, 1994). Factual knowledge regarding OTD, such as waiting list numbers or the number of lives saved by every person who donates their organs, is also a form of knowledge belief. Normative beliefs consist of individual's perceptions of other people's acceptance of the practice of OTD, while altruistic beliefs are individual's perceptions of the beneficial nature of OTD to those awaiting transplants (Radecki & Jaccard, 1997).

MDS and Attitude Structure

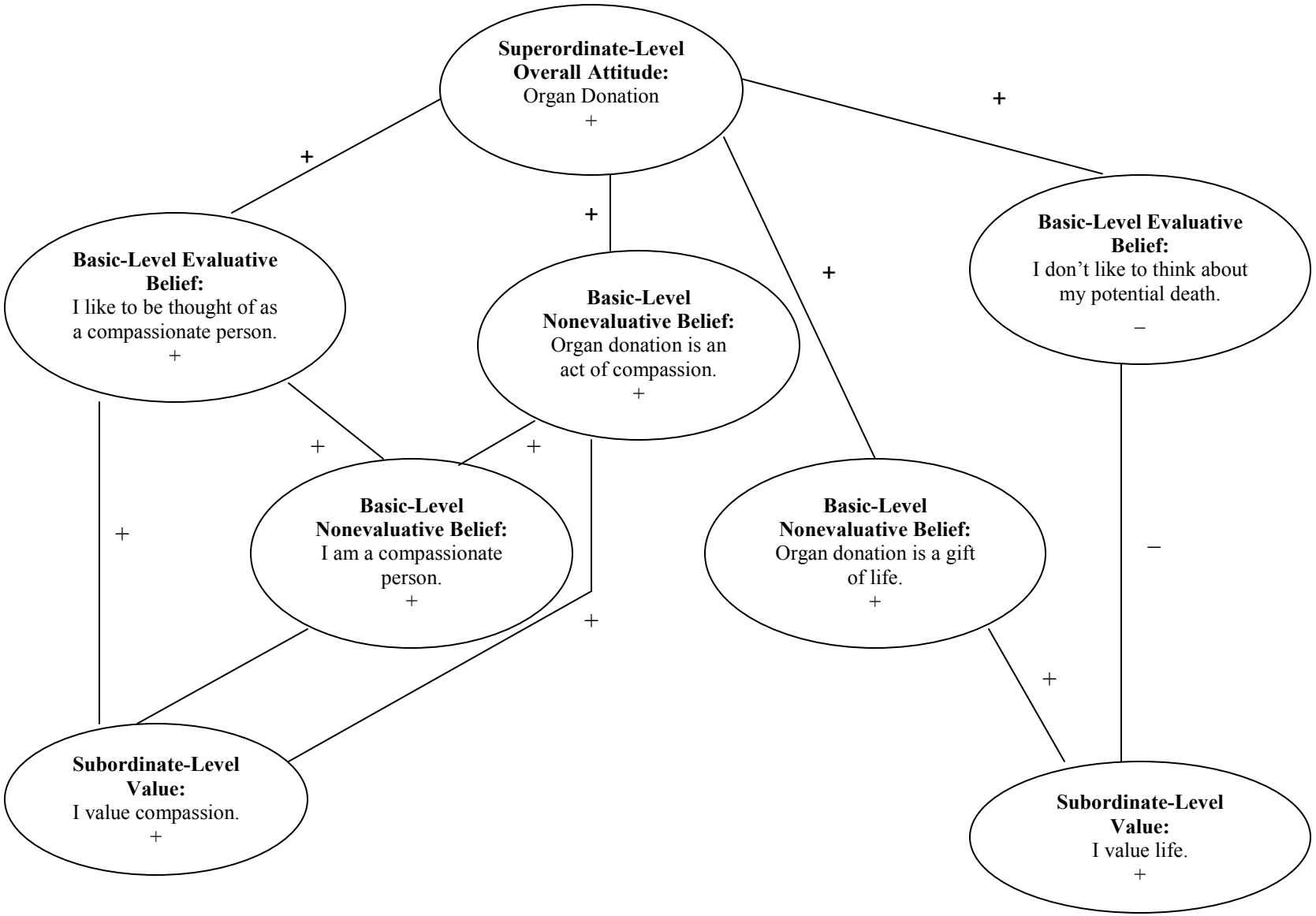
Kerlinger (1984) defines a structure as, "a framework, a design, an organization, a configuration of elements related in some specifiable way. The essence of the

concept is that a structure is defined by the relations among the parts of the structure" (p. 57). Models used to explain the underlying structure of attitudes have been developed since the mid-twentieth century (Fishbein, 1965; Rosenberg, 1956).

One such model, the hierarchical model of attitude structure, conceptualizes attitude structure as relationships between concepts (e.g., beliefs) associated with an attitude (Dinauer & Fink, 2005; Hunter, Levine, & Sayers, 1976, 1984). The hierarchy is organized in three levels – superordinate, basic, and subordinate. The *superordinate level* represents the overall attitude toward a topic. It is the consummation of the set of individual beliefs regarding an attitudinal object (Thompson & Hunt, 1996; Rosch, 1978). The *basic level* consists of the individual beliefs, both evaluative (i.e., affective) and nonevaluative, and their relationships. Evaluative beliefs are judgments regarding goodness of a given attitude object; nonevaluative beliefs are those which can be proven true or false (Thompson & Hunt, 1996). Finally, the *subordinate level* refers to the set of values concerning the attitude object (Thompson & Hunt, 1998). "Values…provide abstract ideas and long range concerns,…and serve as criteria by which objects, actions or events are evaluated" (Bar-Tal, 1990, p. 510).

In terms of organ donation, an individual's overall attitude toward organ donation would reside at the superordinate level. His or her individual beliefs regarding OTD (e.g., organ donation is a benefit to humanity and/or organ donation is a frightening activity) would be found at the basic level, and the individual's underlying values would be found at the subordinate level. This type of a simple organ donation attitude structure is presented in Figure 1.

Figure 1. Hierarchical Organ Donation Attitude Structure



The hypothetical individual to which the structure presented in Figure 1 belongs has an overall positive attitude toward organ and tissue donation. The attitude is founded on two basic values, life and compassion. These represent the subordinate level of the individual's attitude structure. Beliefs, both evaluative and nonevaluative, regarding the relationship between organ and tissue donation and these values such as, "I am a compassionate person" and "Organ and tissue donation is an act of compassion," are found at the basic level. When taken together, the values and beliefs at the subordinate and basic levels, respectively, form the individual's overall attitude toward OTD.

In contrast, MDS supports the spatial-linkage model of attitude structure. Spatial-linkage models also highlight the relationships between beliefs; however, as stated previously, these models mathematically transform the relationships into "distances" and map them on a coordinate system (Abelson, 1967; Torgerson, 1958; Woelfel & Fink, 1980). This model posits that individuals organize their cognitions on a topic based on similarity. Highly related beliefs (i.e., those considered similar) are found closer together, while those less related are relatively far apart (Abelson, 1967). The result is a pictorial representation of an individual's cognitions, a cognitive map, displayed in a multidimensional space.

An individual's beliefs on a topic form a network in which subsets of highly related concepts tend to cluster together (Tourangeau, Rasinski, & D'Andreade, 1991). Taken as a whole, the beliefs and their relationships provide the foundation for an individual's overall attitude toward a concept or object. Referring back to the topic of organ donation, the relationships within an individual's set of religious, cultural,

knowledge, normative, and altruistic beliefs, as well as any myths or misperceptions he or she holds regarding OTD and the donation process, and the interrelationships found therein, help to determine the individual's overall attitude structure and, subsequently, his or her attitude toward donation.

Research utilizing MDS procedures span a number of domains. For example, Barnett, Wigand, Harrison, Woelfel, and Cohen (1981) studied the effects of media on the development of six different cultures. Most cultures sampled shared similar perceptions of the media; only the Mexican and Israeli cultures displayed divergent conceptualizations, as evidenced by their respective placement on the MDS map relative to the four other cultures sampled. Maeda and Ritchie (2003) investigated cultural differences in the perception of friendship. Determinants of relational satisfaction differed as a function of culture; Japanese respondents stressed the importance of comfort over the need for "personal stimulation" found among American friends (Maeda & Ritchie, 2003, p. 590).

Diekhoff, Holder, and Burks (1988) compared the perceptions of family structure of couples undergoing marriage counseling and couples who were not. An analysis of the resulting space revealed differences between the two groups such that couples in counseling "saw themselves as less similar to spouses and saw need for spousal rather than self change" (Diekhoff, Holder, & Burks, 1988, p. 185). The authors advocated using the results to inform future counseling sessions. Other work using MDS in the domain of interpersonal communication has been performed on conflict styles (Cai & Fink, 2002), peer groups (Lease, McFall, Treat, & Viken, 2003), and drug use (Woelfel, Hernandez, & Allen, n.d.).

Fink and Chen (1995) applied MDS in the domain of organizational communication. These researchers investigated faculty members' perceptions of the climate of the department in which they worked and found normative influences at work. A pretest was performed to generate a set of eight words to be included in a pair-comparison measure; three additional terms (e.g., *yourself*, *university today*, and *university faculty*) were included by the researchers for a total of eleven concepts and 55 pair-comparison items. Results revealed that the distance assigned to the concept, *yourself,* and other concepts in the set, most notably the phrase *university today*, decreased with increases in colleague communication. In addition, the authors found a relationship between individuals' attitude, measured as a function of the distances between the term, *yourself,* and the other concepts in the set, and his or her perception of other faculty members' attitudes. The authors concluded that "the amount of communication with outside group members provides a possible source of attitudinal or belief divergence" (Fink & Chen, 1995, p. 516).

A similar MDS procedure was used in the domain of health communication, specifically organ and tissue donation. Maloney, Hall, and Walker (2005) assessed Australians' perceptions of OTD using weighted MDS, in which subject weights are included in the analysis (F. Young, 1987). Respondents were asked to read one of two vignettes on OTD, one framing the donation/transplantation process as a "gift of life" and the other as a sterile medical procedure, and rate a series of words and phrases on "the extent to which each word came to mind" (p. 421). Results indicated that respondents' perceptions of OTD hinged on two words – *life* and *death*, and the structure of the resulting space was organized around these terms. The authors also

found differences in respondents' ratings due to the contextualization of OTD (i.e., the vignette). Respondents reading the "gift of life vignette," as compared to subjects reading the "mechanistic" vignette, emphasized the terms *dignity*, *respect* and *sensitivity for the person who has died* in their ratings (Maloney, Hall, & Walker, 2005).

This method has proven both reliable and valid, and a rich source of information on the topic in question (Barnett, 1972; Fink & Chen, 1995; Gillham & Woelfel, 1977; Woelfel & Fink, 1980; Woelfel, Holmes, Newton, & Kincaid, 1988). Specifically, Gillham and Woelfel (1977) concluded that MDS procedures "produce a stable and precise measurement system which is equivalent to very extensive application of the best conventional measurement systems" (p. 231). These researchers asked faculty and graduate students to rate the degree of similarity between 19 professors in the department at three different points of time; respondents also indicated their perceptions of the professors' political ideologies and research styles. Though subjects' ratings changed across the three instances of data collection, the changes were attributed to time 1 occurring at the beginning of the semester, before new students had a chance to meet the faculty, and to the political environment at the time. The authors concluded that there was "persistence of the major [perceptual] structure across the academic year" (Gillham & Woelfel, 1977, p. 227; brackets added).

Measuring Attitude Change in Multidimensional Space

Traditional attitude measurement in OTD (i.e., Likert scales) assesses attitude change by comparing attitudes at one point in time to those at another, future point. Thus, an individual with an OTD score of 4 at time 1 and a score of 4.5 at time 2 has incurred a .5 change in his or her attitude toward organ donation. This procedure does

not provide much information, only that the attitude has changed and the direction in which it has changed.

Measuring attitude change using MDS, however, provides the same information as Likert scaling, as well as providing information regarding associated structural changes. Woelfel and Saltiel (1988) outline a “multidimensional representation of the general linear model” of attitude change (p. 35). Briefly, the general linear model posits that attitude change is a function of: (1) the old attitude; (2) the number of messages out of which the old attitude was formed; (3) the average value of the messages received about the attitude over a given interval of time; and, (4) the number of messages about the attitude received during the same time interval (Woelfel & Saltiel, 1988). Woelfel and Saltiel introduce the concept of force to this model. A message advocating change an individual’s attitudes “sets up forces for the convergence of” the individual’s current attitude and the attitude position advocated in the message (Woelfel & Saltiel, 1988, p. 41).

Furthermore, Serota, Cody, Barnett, and Taylor (1977) describe, mathematically, the exact procedures used to reduce the distance between two concepts in multidimensional space. In the context of designing effective campaign messages, the authors outlined the series of computations needed to move the concept representing the candidate and that representing the voter (e.g., the self-referential concept) closer together. The model is based on the theory that short distances between these concepts (i.e., *the candidate* and *me*) imply positive attitudes toward the candidate that will be evidenced in actual voting behavior. Support for this theory has been found as discussed in more detail below (Barnett, 1981; Barnett, Serota, & Taylor, 1976).

According to the model, the distance between the candidate's concept and the voter's concept form a vector in multidimensional space such that the candidate's position is located at the origin of the space (Serota et al., 1977). All other concepts in the space are connected by individual vectors to the candidate's position, as well. Movement of the candidate's concept toward that of the voter can only occur along a vector; thus, the most effective campaign messages include the concept or concepts that create vectors with the candidate's position that are closest to the vector created by the voter's position and the candidate's position (Serota et al., 1977).

In the context of organ and tissue donation, it is assumed that short distances between the self-referential concept and OTD are illustrative of, at least, respondents' positive evaluation of donation and, at most, respondents' status as an organ donor. Persuasive messages designed to increase donorship should, logically, reduce the distance between the two aforementioned concepts. This would be accomplished by exposing respondents to information that would move OTD toward another concept in the set and closer to the self-referential concept, as well.

Generally, persuasive messages include new information thought to change an individual's beliefs (e.g., knowledge, religious, cultural) about a topic or issue. According to the spreading activation model, modifications in the structure of an individual's attitude on a topic "will likely lead to some change in the overall evaluation of the attitude" (Petty, 1995, p. 200). Dinauer and Fink (2005) found that the MDS procedures reported here support the spreading activation model. Thus, in multidimensional space, attitude change is a function of the force of a message on the concepts used to form the original attitude.

Barnett and colleagues (Barnett, 1981; Barnett, Serota, & Taylor, 1976; Barnett & Siegel, 1986; Serota, Cody, Barnett, & Taylor, 1977) have provided evidence of this process. Barnett, Serota, and Taylor (1976) conducted an over-time study of the effects of political campaign messages on individuals' perceptions of Congressional candidates. Of the ten concepts included in the pair-comparisons, five were derived from a pretest used to determine the salient political issues of the sample (e.g., *crime prevention*, *integrity and honesty in government*, *inflation*, *busing*, *campaign reform*). The researchers based their decision to include the remaining five concepts (e.g., *me*, *republican candidate*, *democratic candidate*, *Republican Party*, *Democratic Party*) on past research which indicated that party identification and candidates' qualifications and personalities were factors in voters' decision-making (Barnett, Serota, & Taylor, 1976). The authors hypothesized that the candidate with the shortest distance between their representative concept and the respondents (e.g., the concept *me*) would win the race (Barnett, Serota, & Taylor, 1976).

The initial point of data collection revealed respondents' recognition of the incumbent, the Republican candidate, but only limited recognition of the challenger, the Democratic candidate. Respondents' rating of the distance between themselves (i.e., the term *me*) and the incumbent was smaller than that for the challenger. On the basis of these results and the method described above, the authors advised the Democratic candidate on the design of the campaign message to reduce this distance (i.e., the distance between the democratic candidate and the term *me*). Thus, a campaign message aligning the candidate with the Democratic Party and crime prevention was developed and disseminated. As was expected, the second data collection showed a

marked decrease in the distance between the Democratic candidate and the concepts *me*, *Democratic Party*, and *Crime Prevention*. These findings led to suggestions for modifications to the campaign message and a third round of data collection. This round revealed little change, however the Democratic candidate was 2.2 units closer to the concept *me* than was the Republican candidate and was the winner of the Congressional race.

Barnett's (1981) work on the 1976 Presidential campaigns further demonstrates the effects of new information on individuals' attitudes. Twenty political communication students completed a 66-item pair-comparison measure, whose concepts were identified by a pretest, once a week for a twelve week period. Results indicated changes in respondents' attitudes as a function of the debates leading to the 1976 election. The first debate exposed the differences between the two candidates (i.e., Gerald Ford and Jimmy Carter) in terms of their economic policies. Two weeks after the debate, respondents' ratings of the pair-comparisons reflected these differences in that the distances between the concept, *Ford*, and the concepts *economic policy*, *unemployment*, and *Jimmy Carter* increased. Two weeks after the second debate, the distances between the concept, *Ford*, and the concepts *myself*, *intelligent,* and *foreign policy* increased. The findings suggested that Ford was falling out of favor with the sample of respondents. It is worth noting that Carter won the election.

A study on the diffusion of the use of online databases in a sample of lawyers, judges, and accountants found changes in respondents' evaluations of the distances between the databases (*Lexis* and *Westlaw*) and the respondents' own positions (e.g., the terms *my firm* and *me*) depending on the individuals' location in the adoption

process (Barnett & Siegel, 1986). A similar sample was pretested in order to derive the set of concepts used in the pair-comparison measure. Findings of this research revealed “clear distinctions in the structures of individuals’ associations at different stages in the diffusion process” (p. 233). Specifically, individuals with little or no knowledge of the databases rated them further from the concept *me* than did individuals who had used the databases. Additionally, individuals with increased use of the databases were better able to discriminate between the two types (Barnett & Siegel, 1986). Other researchers have reported similar results (Barnett, 1988a; Kincaid, Yum, Woelfel, & Barnett, 1983; Lee & Barnett, 1997).

Attitude Structure and Change, MDS, and OTD

This research serves as a prequel to existent literature on OTD attitudes, in that it attempts to identify the structural characteristics of college students’ attitudes regarding organ and tissue donation, as well as the structural changes incurred by the acquisition of new information, through the use of multidimensional scaling. The application of MDS procedures to the assessment of attitudes toward organ and tissue donation begins with the identification of the set of concepts students use when considering the topic of OTD and making the decision to donate. Thus, the first research question was proposed:

RQ1: What set of concepts (words or phrases) is associated with OTD and students’ decisions to become donors?

The assessment of the relationships among the set of concepts revealed by an investigation into the first research question forms the basis for understanding the structural characteristics of students’ attitudes toward donation. A pair-comparison measure, wherein each concept in the set is uniquely paired with every other concept in

the set, allows for this type of assessment. Students' estimations of the degree of similarity between each pair of concepts provide the relational information needed to identify students' OTD attitude structure. Furthermore, the transformation of pair-comparison data into its graphical representation provides a picture of that structure. The second and third research questions follow this line of reasoning:

RQ2: In what ways are OTD concepts inter-related?

RQ3: What is the MDS map of the set of concepts associated with organ donation/transplantation and the decision to become an organ donor?

Moreover, MDS allows researchers the advantage of knowing how an individual's system of beliefs is changed as a result of exposure to new information or to a persuasive message, as is commonly the case in OTD research. It is expected, then, that if the relationship (i.e., the distance) between beliefs regarding organ and tissue donation is changed due to the acquisition of new information regarding previously established OTD beliefs, change will also occur between other, related beliefs in the set and in the overall attitude toward donation. The fourth research question addresses the issue of change:

RQ4: How does students' OTD structure change with exposure to new information that effects previously established beliefs?

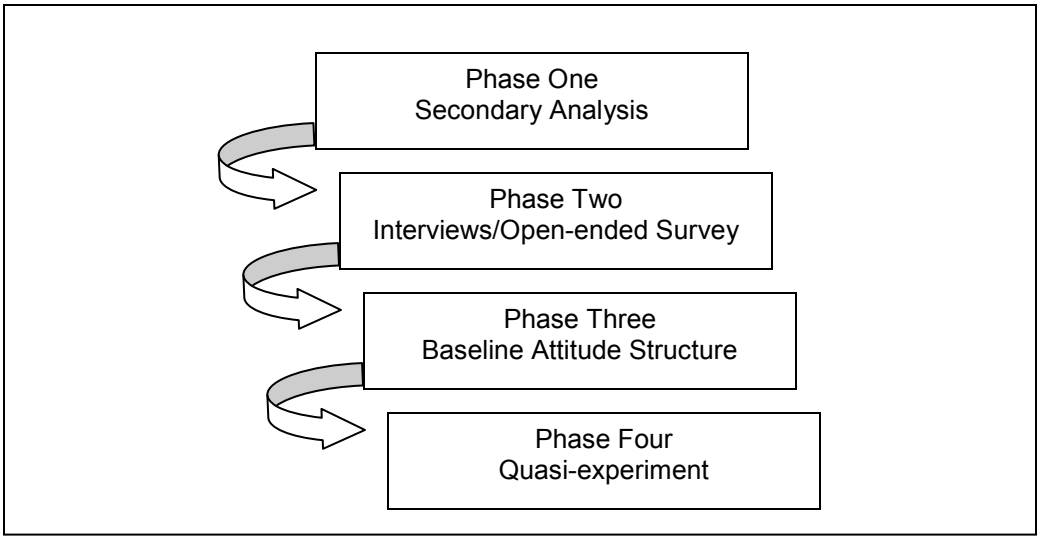
To date, little is known about the topic of OTD attitude structure. Thus, a series of studies were undertaken to explore the questions posed above.

CHAPTER 3: METHOD AND RESULTS

Overview of Procedures

The research began with a secondary analysis of data collected on the topic of organ and tissue donation (phase one). The data were content analyzed to determine the central themes in students' responses to why or why not they had chosen to become organ donors. The results were used to develop a survey questionnaire for phase two. Phase two's open-ended survey was administered both online and in one-on-one interviews as a means of characterizing students' cognitions regarding OTD. These results were then used to construct a pair-comparison measure for phase three. Data collected in phase three served as a baseline assessment of college students' cognitions regarding OTD (i.e., students' OTD attitude structure). Phase four of the research examined the effects of new information on students' OTD attitude structure. All phases of the research were approved by the Social and Behavioral Sciences Institutional Review Board, and documentation of such may be found in Appendix A. Figure 2 displays a pictorial overview of the four phases.

Figure 2. Four Phases of Research



Phase One

Procedure

A secondary analysis of data collected by Thomas H. Feeley in 2003, 2004, and 2005 as part of a grant-funded study was performed.[1] Data were taken from two sources: (1) a short survey completed on site; and, (2) a mailed survey on the topic of organ and tissue donation (Feeley & Servoss, 2005). Responses to two questions assessing respondents' motives for choosing to become, or to not become, organ donors were content analyzed using the Catpac software.

Catpac

Category Package, or Catpac, is an artificial neural network designed for the qualitative, and quantitative, analysis of textual data (Woelfel, 1998). This includes press releases, online postings, news articles, or responses to items on survey questionnaires, such as those described above. The software functions in a manner similar to that of the human brain (Woelfel & Stoyanoff, n. d.). In the brain, external stimuli activate neurons which, in turn, activate neighboring neurons creating a network of activation. Catpac replicates this process by designating each word in a given sample of text as an individual node (i.e., neuron) and activating the node each time the word appears within the text (Woelfel, 1998).

The program analyzes text using a *window* through which it *sees* a given number of words at a time (Woelfel, 1998; Woelfel & Stoyanoff, n. d.). For example, a window of size five would scan through the text five words at a time. Catpac then moves the window, one word at a time, through the entire piece of writing such that it examines

[1] Grant # 1 R39OT01205-01-00, U.S. Department of Health and Human Services, Division of Transplantation, Human Resources Services Administration (HRSA/DoT).

words one through five, two through six, three through seven, and so on, to the end of the text (Woelfel, 1998). This process is referred to as the *slide* (Woelfel, 1998). As the window slides through the text, each word is activated and, because they appear together in the window, connections among the words are established and strengthened every time the words co-occur in the same window (Doerfel & Barnett, 1996; Woelfel, 1998). Catpac's *clamping* feature instructs the program to constantly be aware of the words in the text (Woelfel, 1998; Woelfel & Richards, 1989; Woelfel & Stoyanoff, n. d.). This strengthens the connections between words and allows for the identification of the words that occur together most often.

A case delimited analysis may be chosen as an alternative to the slide process (Doerfel & Barnett, 1996). Should this feature be employed, Catpac runs the analysis in a manner similar to that explained above; however, instead of focusing on the individual words in a dataset, Catpac analyzes each unit of data as a whole (e.g., each individual news article or press release or each unique response to a given survey item).

The result is a matrix of the number of times each word appeared in a given episode (i.e., piece of text, response, etc.). This matrix is multiplied by its transpose to produce a matrix of the "frequency of cooccurance of all possible pairs of words within each episode" (Woelfel & Richards, 1989, p. 24). The program output includes a list of unique words found in the text accompanied by their frequencies, case frequencies, and percent frequencies (Woelfel, 1998). In addition, Catpac produces a dendogram displaying the cluster pattern of the words (i.e., a pictorial representation of the associations of the words; Krippendorff, 1980; Woelfel, 1989). Catpac also generates a

file of coordinates which may be used to plot the words and their associations (i.e., relative distances) in multidimensional space (Doerfel & Barnett, 1996; Woelfel, 1989).

Not all words in a body of text are included in the analysis. The English language contains any number of words that are used as modifiers and referents (e.g., articles, conjunctions, transitive verbs, and prepositions). Generally, these words do not add to the content of the text and, hence, have no bearing on the main ideas or themes of the piece (Doerfel & Barnett, 1996; Woelfel, 1998). For this reason, an exclude file is used to tell Catpac which words in the text to ignore (Appendix B; Woelfel, 1998). The analyst may add words to, or remove them from, the exclude file as needed. Similarly, the analyst may create an include file instructing Catpac to find and clamp specific words in the text.

The user may also change other parameters of the analysis. For example, the program defaults to identify 25 unique words in the analysis. However, should the researcher wish to examine a smaller or larger set of unique words, they may change this setting (Woelfel, 1998). In addition, the analyst has the ability to dictate the window and slide size, the threshold level, and the decay and learning rates of the program. Other user-defined settings include those for clamping, the sliding mechanism, the transfer function, and the clustering method to be used in the analysis (Woelfel, 1998).

Applications of the Catpac software can be found in various contexts. Salisbury (2001) used the software to analyze the external corporate communications of Visa International in the assessment of the organization's public image. The analysis revealed two themes or images imbedded in Visa's press releases, Internet postings, and annual report. The first theme equated Visa with cutting edge banking technologies,

the second with its position in the market (Salisbury, 2001). Freeman and Barnett (1994) also used Catpac to analyze corporate messages, focusing on message effects on organizational culture, and Rice and Danowski (1993) and Sherbloom, Reinsch, and Beswick (2001) used the software to examine corporate voice mails. In addition, Jang and Barnett (1994) examined the external communications of American and Japanese corporations as functions of their respective cultures. In the context of health communication, Barnett and Hwang (2006) applied the software to the analysis of online breast cancer discussion groups. Finally, Doerfel and Marsh's (2003) study on presidential debates applied Catpac to the realm of political communication.

Catpac has advantages over traditional content analytic methodologies. To begin, Catpac is timely in that a typical run of the program takes under one minute (Woelfel & Stoyanoff, n. d.). Coding and classifying text by hand can take hours or days. Additionally, Catpac lends itself to the objective study of textual data making the results highly replicable, as opposed to other means of qualitative textual analysis which are subjective in nature and vulnerable to the biases of the content analyst (Doerfel & Marsh, 2003; Woelfel & Stoyanoff, n. d.).

Results

Three hundred eighty-nine responses to the question, "If you have not indicated your intent by signing an organ donor card or enrolling in the registry, why have you not?," and 498 responses to the question, "Why did you decide to enroll in New York State's Organ & Tissue Donor registry?," were content analyzed using the Catpac software. The following parameters were used with each analysis: number of unique

words – 30; window size – 7; slide size – 1; threshold – 0.01; learning rate – 0.01; and, claming – on. The centroid clustering method was used for all analyses.[2]

Figure 3 displays the Catpac output listing the thirty unique words, sorted by descending frequency and by alphabet, for nondonors. The words *not, thought*, *don't*, *haven't*, and *never* occurred most often in the analyzed text suggesting that respondents generally don't or haven't thought about the possibility of donation. The dendogram for nondonors revealed four clusters, but two general themes in the data; the first of which support this supposition (Figure 4). They were *haven't thought about it / unsure* and *other reasons*.

Figure 3. Most Frequently used Words in Nondonors' Responses

DESCENDING FREQUENCY LIST

WORD	FREQ	PCNT	CASE FREQ	CASE PCNT
NOT	115	15.5	442	60.1
THOUGHT	63	8.5	289	39.3
DON'T	56	7.6	248	33.7
HAVEN'T	56	7.6	234	31.8
NEVER	42	5.7	192	26.1
KNOW	38	5.1	180	24.5
WANT	37	5.0	170	23.1
THINK	29	3.9	133	18.1
SURE	28	3.8	130	17.7
LICENSE	26	3.5	125	17.0
WILL	19	2.6	94	12.8
DONATE	18	2.4	90	12.2
FAMILY	18	2.4	85	11.5
REALLY	17	2.3	79	10.7
DONOR	16	2.2	75	10.2
ORGAN	16	2.2	68	9.2
TIME	15	2.0	75	10.2
AROUND	13	1.8	61	8.3
CHANCE	12	1.6	59	8.0
PLAN	12	1.6	58	7.9
ORGANS	11	1.5	55	7.5
REASON	11	1.5	53	7.2
DIE	10	1.4	50	6.8
ENOUGH	10	1.4	46	6.2
GOTTEN	10	1.4	50	6.8
READY	10	1.4	49	6.7
AFRAID	9	1.2	43	5.8
DEATH	8	1.1	36	4.9
DECISION	8	1.1	36	4.9
GIVEN	7	0.9	35	4.8

ALPHABETICALLY SORTED LIST

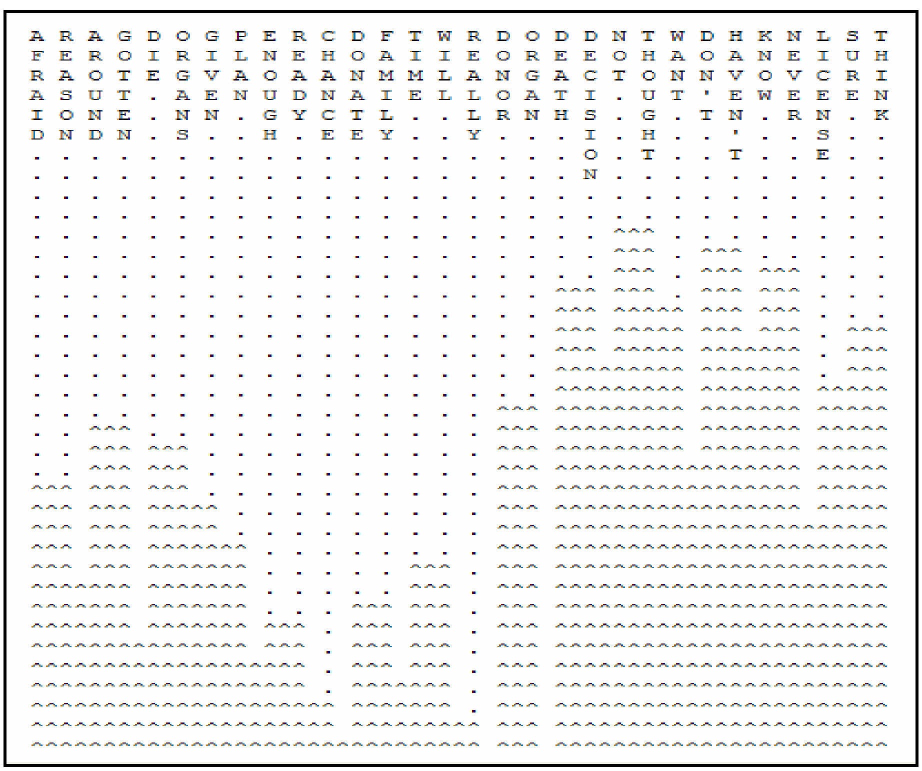
WORD	FREQ	PCNT	CASE FREQ	CASE PCNT
AFRAID	9	1.2	43	5.8
AROUND	13	1.8	61	8.3
CHANCE	12	1.6	59	8.0
DEATH	8	1.1	36	4.9
DECISION	8	1.1	36	4.9
DIE	10	1.4	50	6.8
DON'T	56	7.6	248	33.7
DONATE	18	2.4	90	12.2
DONOR	16	2.2	75	10.2
ENOUGH	10	1.4	46	6.2
FAMILY	18	2.4	85	11.5
GIVEN	7	0.9	35	4.8
GOTTEN	10	1.4	50	6.8
HAVEN'T	56	7.6	234	31.8
KNOW	38	5.1	180	24.5
LICENSE	26	3.5	125	17.0
NEVER	42	5.7	192	26.1
NOT	115	15.5	442	60.1
ORGAN	16	2.2	68	9.2
ORGANS	11	1.5	55	7.5
PLAN	12	1.6	58	7.9
READY	10	1.4	49	6.7
REALLY	17	2.3	79	10.7
REASON	11	1.5	53	7.2
SURE	28	3.8	130	17.7
THINK	29	3.9	133	18.1
THOUGHT	63	8.5	289	39.3
TIME	15	2.0	75	10.2
WANT	37	5.0	170	23.1
WILL	19	2.6	94	12.8

[2] A case delimited analysis in which each response was analyzed individually would have been the preferred method for this data. Results from the case delimited analyses can be found in Appendix C. Ward's clustering method was used in the corrected analyses.

The theme found in the first and largest cluster on the right side of the dendogram, was *haven't thought about it / unsure*. This was illustrated in students' written responses: "have not thought enough about it yet," "not sure if I want to," "never crossed my mind," "never thought about it until now," "haven't gotten around to it," and "don't think I will die soon." The concept underlying the second cluster was *other reasons*. Students cited reasons such as religion (e.g., "religious reasons"), fear (e.g., "scared the procedure might go wrong" and "afraid that doctors won't try to save me"), and laziness (e.g., "lazy…will get around to it maybe") for not becoming a donor.

A third cluster of concepts consisted of additional reasons for not registering to become an organ donor. These were time (e.g., "have not had the time") and family objections (e.g., "my wife does not agree"). The fourth cluster was composed of the terms *organ* and *donor* and speaks to the validity of the Catpac software.

Figure 4. Nondonors' Dendogram



The concepts used in donors' responses formed two large clusters, one on each side of the dendogram. The five most commonly used concepts (i.e., *I*, *help*, *not*, *good*, and *need*) were included in the main cluster on the right (Figure 5). The terms *I* and *help* made up the most prominent subcluster of this cluster suggesting that students were motivated to become donors by the thought of being able to help others (Figure 6). For example, students' responses included, "If others can benefit from my organs after my death, I want to help them live," "I want to help if I could," and "I would like to help someone in need." Other subclusters of the right, main cluster included such terms as *save* and *life* (e.g., "I can help save a life"), and *am* and *not* (e.g., "I will be dead and I am not going to use the organs anymore"). These subclusters lend support to this theme.

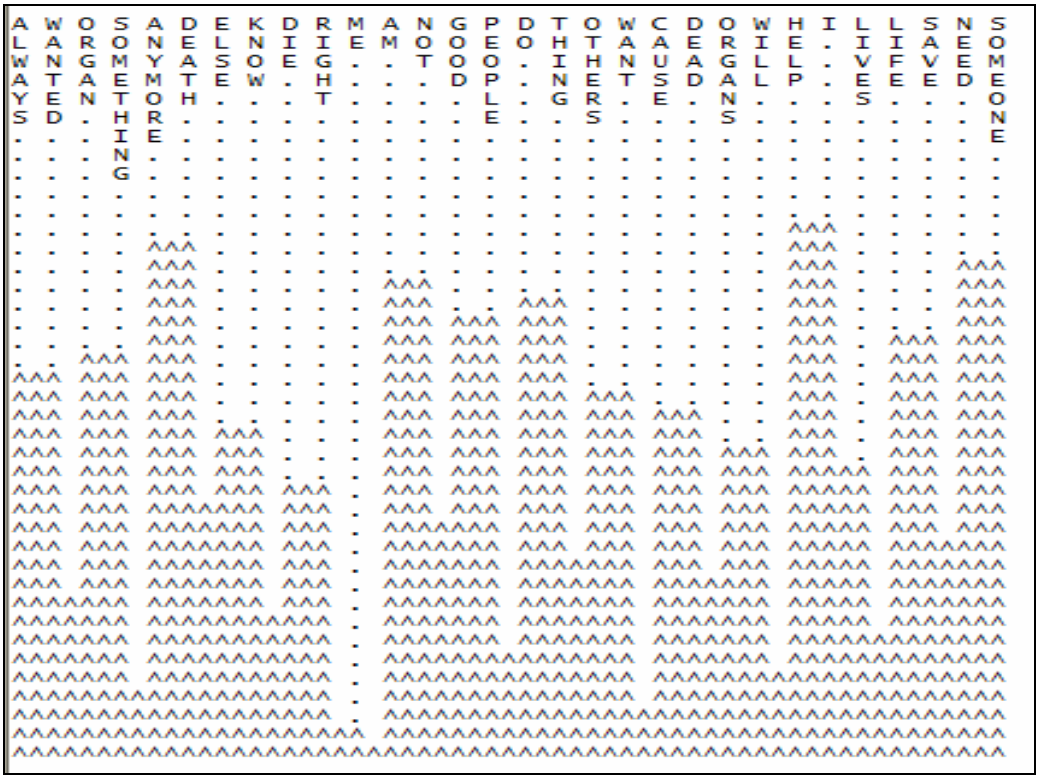
Figure 5. Most Frequently used Words in Donors' Responses

DESCENDING FREQUENCY LIST					ALPHABETICALLY SORTED LIST				
WORD	FREQ	PCNT	CASE FREQ	CASE PCNT	WORD	FREQ	PCNT	CASE FREQ	CASE PCNT
I	241	18.3	1099	83.6	ALWAYS	13	1.0	79	6.0
HELP	116	8.8	643	48.9	AM	51	3.9	328	25.0
NOT	88	6.7	520	39.6	ANYMORE	8	0.6	56	4.3
GOOD	69	5.2	382	29.1	CAUSE	36	2.7	214	16.3
NEED	69	5.2	469	35.7	DEAD	32	2.4	215	16.4
DO	64	4.8	399	30.4	DEATH	13	1.0	88	6.7
SAVE	61	4.6	373	28.4	DIE	16	1.2	111	8.4
ORGANS	56	4.2	363	27.6	DO	64	4.8	399	30.4
AM	51	3.9	328	25.0	ELSE	9	0.7	57	4.3
PEOPLE	50	3.8	296	22.5	GOOD	69	5.2	382	29.1
LIFE	43	3.3	253	19.3	HELP	116	8.8	643	48.9
LIVES	43	3.3	278	21.2	I	241	18.3	1099	83.6
WANT	43	3.3	287	21.8	KNOW	9	0.7	63	4.8
OTHERS	39	3.0	242	18.4	LIFE	43	3.3	253	19.3
CAUSE	36	2.7	214	16.3	LIVES	43	3.3	278	21.2
DEAD	32	2.4	215	16.4	ME	20	1.5	132	10.0
THING	32	2.4	201	15.3	NEED	69	5.2	469	35.7
SOMEONE	30	2.3	199	15.1	NOT	88	6.7	520	39.6
WILL	21	1.6	147	11.2	ORGAN	8	0.6	56	4.3
ME	20	1.5	132	10.0	ORGANS	56	4.2	363	27.6
DIE	16	1.2	111	8.4	OTHERS	39	3.0	242	18.4
RIGHT	15	1.1	96	7.3	PEOPLE	50	3.8	296	22.5
WANTED	15	1.1	91	6.9	RIGHT	15	1.1	96	7.3
ALWAYS	13	1.0	79	6.0	SAVE	61	4.6	373	28.4
DEATH	13	1.0	88	6.7	SOMEONE	30	2.3	199	15.1
SOMETHING	10	0.8	67	5.1	SOMETHING	10	0.8	67	5.1
ELSE	9	0.7	57	4.3	THING	32	2.4	201	15.3
KNOW	9	0.7	63	4.8	WANT	43	3.3	287	21.8
ANYMORE	8	0.6	56	4.3	WANTED	15	1.1	91	6.9
ORGAN	8	0.6	56	4.3	WILL	21	1.6	147	11.2

A second cluster, located on the left of the dendogram, consisted of two smaller subclusters. The first subcluster was formed with the terms *always*, *wanted*, *organ*, and

something, intimating students' past intent toward becoming donors. Indeed, many students indicated their long-term inclinations toward donation: "I always wanted to do this and they had registration on campus," "I have always wanted to but didn't know how." The other subcluster contained the words *death*, *anymore*, *else*, *know*, *die*, and *right*. Many students were aware of the fact that, upon their death, their organs would be of no use to them (e.g., "If I am dead, I do not need them anymore; I would rather be partly responsible for extending someone's life," "Cause I feel I won't have any use for them after I am dead so I figure why not help someone who needs it").

Figure 6. Donors' Dendogram



Overall, the results from the two data sets categorize nondonors' reluctance to become an organ donor as a function of their lack of consideration of the topic, various anxieties related to the donation and transplantation process, and religious and family objections. Donors, however, appeared to be motivated toward donation for largely

altruistic reasons (e.g., help other people and save lives). These central themes, revealed by the content analysis of donors' and nondonors' reasoning behind their choice of donor status, were included in a subsequent open-ended survey used in phase two.

Phase Two

Participants

A convenience sample of students enrolled in four upper-level Communication courses at the State University of New York at Buffalo were invited to participate in phase two of this research. Participants were offered course credit, as designated by their respective instructors, in exchange for their voluntary participation.

Measure

A 14-item, open-ended instrument, with the exception of one closed-ended question assessing students' donor status, was developed using the results obtained from phase one. The first question was a direct measure of students' cognitions regarding organ and tissue donation: "Please indicate your thoughts, feelings, attitudes, and/or beliefs regarding organ and tissue donation (OTD)." Respondents were then asked to indicate their donor status. A third question, contingent on students' responses to question two, was posed to better understand the reasoning behind students' choices, the form of which was dependent upon students' response to question two. Donors were asked, "…please explain why you have made the decision to become a donor," while those not yet registered to donate their organs were prompted to "…please indicate why you have not done so."

Next, students were asked to respond openly to a series of ten words and phrases commonly associated with OTD. Specifically, they were asked to indicate, "…what comes to mind when thinking of these words as they are used in reference to organ and tissue donation and the transplantation process." The major themes underlying students' choices for or against donation, as revealed through phase one's secondary analysis, were included on this list. These were *help others*, *save lives*, and *unsure.*

In addition, the phrase *religious objections* was included for two reasons. First, although the term was not included in the thirty unique words identified by Catpac and, thus, was not an underlying theme, a small number of nondonors expressed theological concerns regarding the prospect of becoming an organ donor (N = 15). More importantly, religion has long been cited as a barrier to becoming an organ donor (Alden & Cheung, 2000; Cheung, Alden & Wheeler, 1998; Radjecki & Jaccard, 1997; Rumsey, Hurford, & Cole, 2003; Ryckman et al., 2004). Specifically, researchers suggest that students, particularly those of Asian descent, place a high degree of "importance [on] maintaining body integrity" (Cheung, Alden, & Wheeler, 1998, p. 3609). Hence, the phrase *body wholeness* was added, as well.

Anxiety was added to the series as well, as past OTD research implicates students' anxieties regarding the donation and transplantation process as barriers to becoming donors (Kopfman & Smith, 1996; Robbins, 1990; Sanner, 1994). As noted in phase one, nondonors expressed fears regarding the donation and transplantation procedure, and of the life-saving efforts of rescue personnel. Other fears include those

associated with the consideration of one's own mortality (i.e., thinking about dying) and of other peoples' death (Robbins, 1990).

The terms *compassionate*, *knowledgeable*, and *discussion with others* were also added to the series of terms and phrases. A number of studies have included measures of participants' altruism, empathy, and helpfulness (Horton and Horton, 1991; Morgan & Miller, 2001; Skumanich and Kintsfather, 1996). These researchers contend that the act of becoming an organ donor is associated with increased levels on these measures. Both participants' knowledge of the donation process and transplantation procedure and participants' proclivity to communicate their attitudes regarding organ donation to their families have been included in OTD models, as well (Horton & Horton, 1990, 1991; Morgan & Miller, 2001). The role of the three concepts (i.e., *compassionate*, *knowledgeable*, and *discussion with others*) in individuals' decisions regarding organ donorship led to their inclusion here.

The last term, *good*, was one of the more commonly used concepts in donors' responses to the question of the motivations behind choosing to become an organ donor. It ranked second, behind *help*, in terms of its frequency of use. It was also chosen for inclusion in phase two due to its evaluative nature.

The last question on the instrument allowed students to offer any additional thoughts on the topic: "Are there any other words or phrases that should be added to this list or anything else that comes to mind that has not yet been mentioned?"

Procedure

The instrument was administered in two forms: (1) students in three undergraduate classes were asked to sign-up for one-on-one interviews with the

Principal Investigator; and, (2) students in the fourth class, the largest, completed the same questions in an online survey. The interviews were moderately scheduled to allow for the use of probing questions (Stewart & Cash, 2003) and all were held in a private office in the university's Communication department. Upon entering the office, students were informed of the nature of the interviews and were asked to read and sign a voluntary consent form which included a clause for the use of an audio recorder during the interview (Appendix A). Students were also given the option of completing the questionnaire in a paper and pencil format. All students gave their consent to be audiotaped (Appendix D contains the transcript of the interviews). Upon completion of each interview, students were thanked for their participation and escorted from the room.

The online surveys were created and accessed through *SurveyMonkey.com*, a website devoted to these tasks.

Data collected during the interviews and from the online survey were content analyzed, and the results used to develop the survey questionnaire for phase three.

Results

Basic demographic data and students' responses to the first two questions regarding thoughts about OTD and reasons for students' donation choices are provided in the next two sections entitled "Interviews" and "Surveys." This information is presented in tabular form as well (Table 1). Results of the content analyses of students' responses to the ten words and phrases (e.g., *help others*, *save lives*, *good*) are reported in the third section labeled "Concepts."

Table 1. Interviewee Characteristics

Participant	*Gender*	*Donor Status*	*Evaluation of OTD*	*Intend to Donate*	*Reason for not Donating*	*Reason for Donating*
1	F	N	+	No	Personal Beliefs	
2	M	N	+	Yes	Family Objections	
3	F	D	+			Good Cause
4	M	N	+	Yes	Unsure How	
5	M	N	--	No	Family	
6	F	N	+	Unsure	Myths	
7	F	N	+	Unsure	Body Wholeness	
8	M	N	+	Yes	Lack of Opportunity	
9	F	N	+	Unsure	Family / Body Wholeness	
10	M	N	+	No	Religion	
11	M	N	+	Yes	Lack of Opportunity	
12	F	N	+	Unsure	Lack of Information	
13	F	N	--	No	Myths	
14	M	N	+	Unsure	Family	
15	M	D	+			Altruism
16	M	N	+	Unsure	Family Experiences	
17	M	N	+	Yes	Lack of Opportunity	
18	M	N	+	Yes	Lack of Information	
19	F	N	+	Yes	Lack of Information	
20	F	D	+			Altruism
21	F	N	--	No	Lack of Information	
22	F	N	+	Unsure	Lack of Information	
23	F	D	+			Good Cause
24	F	N	+	Unsure	Myths	
25	F	D	+			Altruism
26	F	N	+	Unsure	Lack of Information	

Table 1. Interviewee Characteristics

Participant	*Gender*	*Donor Status*	*Evaluation of OTD*	*Intend to Donate*	*Reason for not Donating*	*Reason for Donating*
27	F	D	+			Altruism
28	F	N	+	Yes	Lack of Consideration	
29	F	D	+			Altruism
30	F	N	+	Yes	Lack of Consideration	
31	F	N	+	Unsure	Myths	
32	F	N	+	Yes	Lack of Information	

Note: F – Female, M – Male; N – Nondonor, D – Donor.

Interviews. Twenty-one females and eleven males took part in the interviews (*N* = 32). Of those interviewed, seven (21%) were registered organ donors. That is, they had indicated their desire to donate organs posthumously while renewing their license or by signing the back of their license. This is consistent with Feeley (in press), and is an indication that the sample of students participating in the interviews was a good cross-section of the undergraduate population within the Communication department. Six of the seven donors were female.

Not surprisingly, all but three donors held positive cognitions regarding the topic (e.g., Subject 3: "I think it's a good thing because it benefits a lot of people;" Subject 15: "I'm perfectly okay with organ and tissue donation; I think it's a good thing"). These individuals reported altruistic motivations for the decisions to become donors. For example, Subject 15 remarked, "I just think it's selfish not to give it [organs] out. You're not going to use it [organs] anymore" (words in brackets added for clarity).

The three students with negative thoughts regarding donation were nondonors with no intentions toward becoming organ donors. Reasons behind these students' anti-donation stance included lack of information (e.g., "…it's a topic that I would like to know more about because now I'm kind of opposed…just because I don't know), myths (e.g., "I've…held to the notion…that if you get in an accident or say something does happen, if you are marked as an organ donor they…might not do as much to save your life"), and family concerns (e.g., "…maybe if it was for a family member I would go out of my way, but not for a normal stranger").

The remaining twenty-two interviewees had positive evaluations of organ donation. Although two interviewees, Subjects 1 and 10, reported positive cognitions

regarding OTD, neither intended to ever become donors themselves. Subject 10 stated, “I don’t think I would personally do it. I’m not against it however. I believe that if you can save somebody’s life then so be it.” Similarly, Subject 1 commented that, while donation is a “good thing” and an option for some, she did not “feel comfortable doing it.” These participants cited religious and personal beliefs, respectively, for their decisions.

Ten students with positive orientations toward OTD indicated their future intent to become donors; ten others were undecided. When asked what had kept these individuals from becoming registered donors, students cited a lack of information (e.g., where/how to register), myths, and body wholeness issues (e.g., “…I think I want my body to kept after I die and kept like it is”).

Thus, with the exception of three students respondents held positive conceptualizations of organ and tissue donation and the transplantation process. Students unregistered as donors were divided on their intentions toward donation (i.e., 10 intended donors, 10 unsure), but all expressed positive thoughts about OTD, as well. In addition, two students with no future intent toward donorship acknowledged the beneficial nature of the process. Respondents reporting uncertainty about donorship and those sure about not becoming donors in the future were either uninformed or misinformed about the topic.

Surveys. Seventy-three students accessed the online version of the survey instrument (Appendix A). Across all 14 questions posed, the responses of two participants were unintelligible and were removed from the analyses. In addition, a number of participants chose not to respond to one or more of the survey items. Thus, the number of responses used in the analyses ranged from 41 to 71.

Overall, students' thoughts and feelings regarding OTD were positive. Most students, even those who indicated their lack of desire to become an organ donor, responded positively to question one (i.e., please indicate your thoughts, feelings, attitudes, and/or beliefs regarding organ and tissue donation). Only three students, out of a total of 71, responded negatively to this question (e.g., "I do not feel very strongly about organ donation," "I would not donate an organ," "I think organ donation stinks").

Forty students responded to question two concerning students' reasons for becoming an organ donor. Eleven responses were removed due to the students' status as a nondonor and the lack of a usable response (e.g., "see above," "N/A"). A total of twenty-nine students (40.8%) were registered organ donors. These students made the decision to become a donor due to their personal experiences with the donation process (*N* = 3), one student in this category was a recipient of a tissue transplant, as a result of family influences (*N* = 2), and simply to help those in need (*N* = 24).

Of the fifty responses to question three, which asked nondonors to explain their reasons for their donor status, 41 responses were analyzed (i.e., two responses were unintelligible and seven responses indicated students' status as donors). Many responses illustrated students' intentions to become donors in the future (e.g., "I just haven't go[t] around to it"; *N* = 7), others noted body wholeness issues (e.g., "I have not done it because I want by body intact when I die"; *N* = 5), and still others cited family objections (*N* = 3) or lack of donorship knowledge/information (*N* = 2). The remaining responses noted students' issues with the thought of their own death, lack of consideration of the topic, and "personal beliefs."

Concepts. The following account details the results of the content analyses for each of the nine words and phrases included in the interview/survey instrument. Participants' responses from both the interviews and the survey were combined for these analyses. The same parameters as used in the Catpac analyses in phase one were used here.

Save lives. Figures 7 and 8 display the Catpac output and dendogram, respectively, for students' responses to the phrase *save lives* (*N* = 101). After the terms *I*, *save*, and *lives*, the most commonly used words included *life*, *people*, *organ*, *organs*, and *think*. Students generally perceive of organ donation as a life-saving act.

Figure 7. Most Frequently used Words for *Save Lives*

DESCENDING FREQUENCY LIST

WORD	FREQ	PCNT	CASE FREQ	CASE PCNT
I	53	13.0	215	53.5
SAVE	41	10.0	232	57.7
LIVES	37	9.1	203	50.5
LIFE	20	4.9	120	29.9
PEOPLE	19	4.7	119	29.6
ORGAN	18	4.4	124	30.8
ORGANS	18	4.4	112	27.9
THINK	17	4.2	105	26.1
NOT	15	3.7	96	23.9
DO	14	3.4	81	20.1
GOOD	13	3.2	74	18.4
TISSUE	13	3.2	90	22.4
DONATION	12	2.9	81	20.1
SOMEONE	11	2.7	73	18.2
HELP	9	2.2	56	13.9
NEED	9	2.2	61	15.2
PERSON	9	2.2	52	12.9
AM	8	2.0	55	13.7
DONATING	8	2.0	46	11.4
GREAT	8	2.0	56	13.9
THING	8	2.0	44	10.9
KNOW	6	1.5	40	10.0
SAVED	6	1.5	39	9.7
WILL	6	1.5	36	9.0
DEATH	5	1.2	35	8.7
DONATE	5	1.2	31	7.7
GO	5	1.2	35	8.7
LIVE	5	1.2	31	7.7
TRANSPLANT	5	1.2	29	7.2
YES	5	1.2	33	8.2

ALPHABETICALLY SORTED LIST

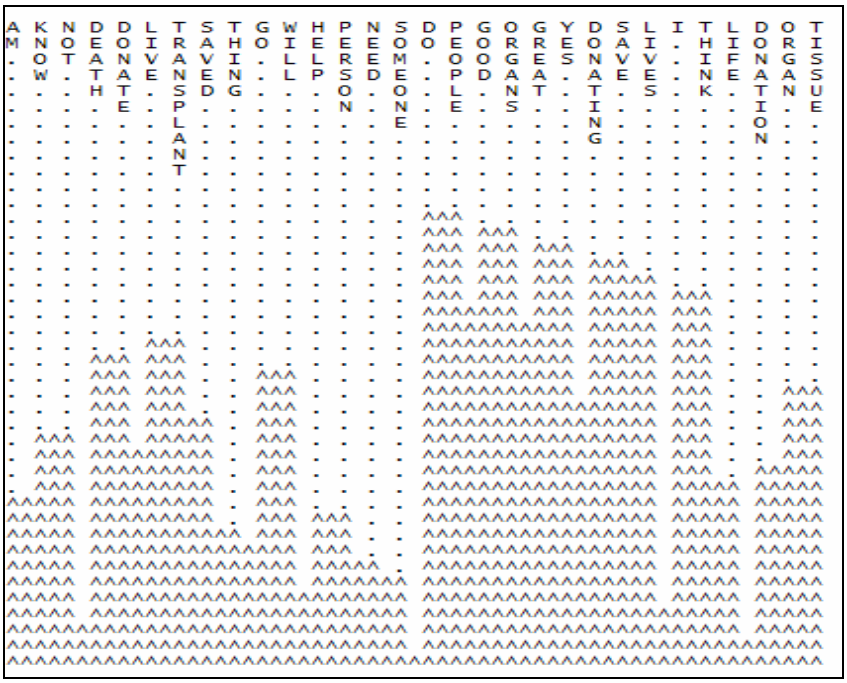
WORD	FREQ	PCNT	CASE FREQ	CASE PCNT
AM	8	2.0	55	13.7
DEATH	5	1.2	35	8.7
DO	14	3.4	81	20.1
DONATE	5	1.2	31	7.7
DONATING	8	2.0	46	11.4
DONATION	12	2.9	81	20.1
GO	5	1.2	35	8.7
GOOD	13	3.2	74	18.4
GREAT	8	2.0	56	13.9
HELP	9	2.2	56	13.9
I	53	13.0	215	53.5
KNOW	6	1.5	40	10.0
LIFE	20	4.9	120	29.9
LIVE	5	1.2	31	7.7
LIVES	37	9.1	203	50.5
NEED	9	2.2	61	15.2
NOT	15	3.7	96	23.9
ORGAN	18	4.4	124	30.8
ORGANS	18	4.4	112	27.9
PEOPLE	19	4.7	119	29.6
PERSON	9	2.2	52	12.9
SAVE	41	10.0	232	57.7
SAVED	6	1.5	39	9.7
SOMEONE	11	2.7	73	18.2
THING	8	2.0	44	10.9
THINK	17	4.2	105	26.1
TISSUE	13	3.2	90	22.4
TRANSPLANT	5	1.2	29	7.2
WILL	6	1.5	36	9.0
YES	5	1.2	33	8.2

The dendogram shows two large clusters, the first of which illustrates students' perceptions of donation as helping people in need. The largest subcluster in this

grouping was formed by the concepts *saved*, *transplant*, *live*, *donate*, and *death*. A second, smaller subcluster was formed with the terms *help*, *person*, *need*, and s*omeone*. Students' responses illustrated these themes (e.g., "life from death," "help other people who needs help," "by donating organs we are able to help people who are less fortunate and in need of certain tissues and organs to save lives").

The underlying theme of the second cluster was that organ donation is good/great and does save lives. The most common response included the terms *save* and *lives* (e.g., "It can save many lives," "Donating organs does save lives"). Students also commented on the value of OTD: "It's a good gift to give and receive," "It is…a good thing." Two smaller subclusters, which speak for themselves, included the terms *I*, *think*, and, *life,* and *donation*, *organ*, and *tissue*, respectively.

Figure 8. *Save Lives* Dendogram



Help others. Students (*N* = 101) often included such terms as *I*, *help*, *others*, *people*, and *organ* in their responses (Figure 9). The dendogram consisted of four main

clusters (Figure 10). The tallest cluster, located on the left of the dendogram, signifies students' general perception of OTD as an altruistic act (e.g., *help*, *helping*, *good*, *person*). The sentiment that organ donation and helping others is "good" was repeatedly expressed in the student sample. The term *not*, found in this subcluster, was often used as a means for outlining the multiple purposes of donation (e.g., you are not only helping the person by letting them live but you are helping the family to have their family member back and healthy"), or for commenting on the lack of donors (e.g., "I do not think there is enough organ and tissue donation").

Figure 9. Most Frequently used Words for *Help Others*

DESCENDING FREQUENCY LIST

WORD	FREQ	PCNT	CASE FREQ	CASE PCNT
I	47	11.6	219	55.0
OTHERS	38	9.4	219	55.0
HELP	36	8.9	203	51.0
PEOPLE	21	5.2	133	33.4
ORGAN	19	4.7	123	30.9
THINK	19	4.7	113	28.4
HELPING	18	4.5	99	24.9
NEED	15	3.7	87	21.9
LIFE	14	3.5	88	22.1
ORGANS	14	3.5	91	22.9
DONATING	13	3.2	78	19.6
LIVES	13	3.2	83	20.9
DONATION	12	3.0	84	21.1
GOOD	12	3.0	72	18.1
HELPS	10	2.5	65	16.3
SAVE	10	2.5	70	17.6
SOMEONE	10	2.5	64	16.1
TISSUE	10	2.5	70	17.6
SAVING	9	2.2	61	15.3
ELSE	8	2.0	56	14.1
THING	8	2.0	45	11.3
FAMILIES	7	1.7	44	11.1
WILL	7	1.7	49	12.3
AGAIN	6	1.5	40	10.1
PERSON	6	1.5	32	8.0
FAMILY	5	1.2	26	6.5
GREAT	5	1.2	27	6.8
ABLE	4	1.0	28	7.0
ALWAYS	4	1.0	28	7.0
BETTER	4	1.0	28	7.0

ALPHABETICALLY SORTED LIST

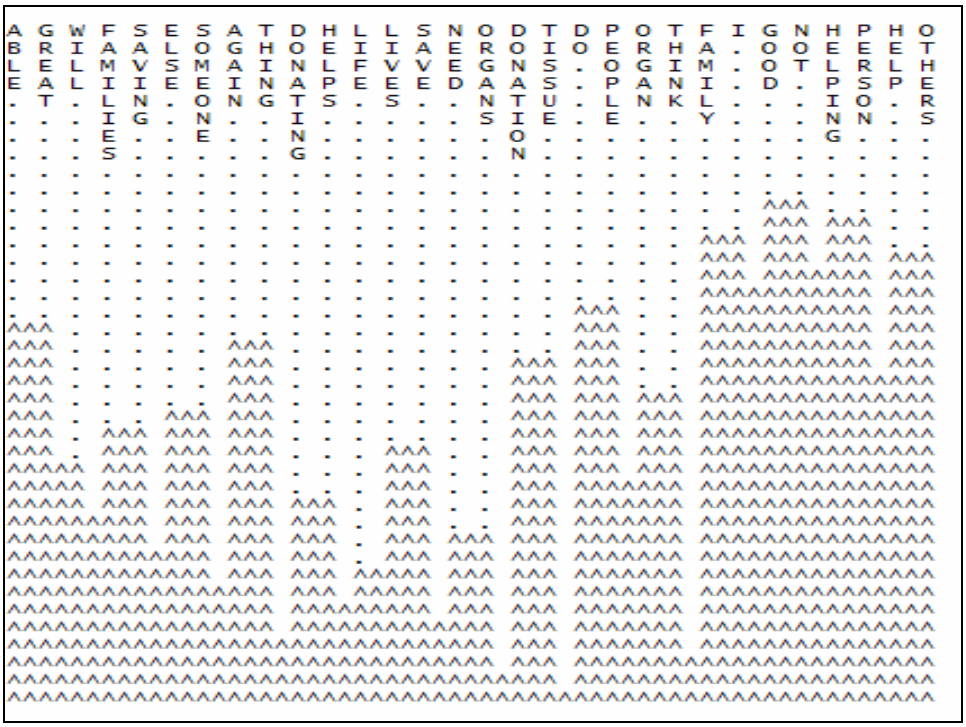
WORD	FREQ	PCNT	CASE FREQ	CASE PCNT
ABLE	4	1.0	28	7.0
AGAIN	6	1.5	40	10.1
ALWAYS	4	1.0	28	7.0
BETTER	4	1.0	28	7.0
DONATING	13	3.2	78	19.6
DONATION	12	3.0	84	21.1
ELSE	8	2.0	56	14.1
FAMILIES	7	1.7	44	11.1
FAMILY	5	1.2	26	6.5
GOOD	12	3.0	72	18.1
GREAT	5	1.2	27	6.8
HELP	36	8.9	203	51.0
HELPING	18	4.5	99	24.9
HELPS	10	2.5	65	16.3
I	47	11.6	219	55.0
LIFE	14	3.5	88	22.1
LIVES	13	3.2	83	20.9
NEED	15	3.7	87	21.9
ORGAN	19	4.7	123	30.9
ORGANS	14	3.5	91	22.9
OTHERS	38	9.4	219	55.0
PEOPLE	21	5.2	133	33.4
PERSON	6	1.5	32	8.0
SAVE	10	2.5	70	17.6
SAVING	9	2.2	61	15.3
SOMEONE	10	2.5	64	16.1
THING	8	2.0	45	11.3
THINK	19	4.7	113	28.4
TISSUE	10	2.5	70	17.6
WILL	7	1.7	49	12.3

The second cluster contained *do*, *people*, *organ*, and *think* and is representative of students' remarks on the fact that more people should do it (i.e., donate) as well as

students' thoughts that "organ donation just makes sense." A third cluster containing the terms *tissue* and *donation* is located in the center of the dendogram.

The last cluster contained 16 terms including, *donating*, *helps*, *save*, *lives*, *someone*, *families*, and *able*. Eleven students noted the beneficial nature of OTD to recipients' families. For example, one student wrote, "It helps not only the people that receive the donation, but the families also." Other students associated donation with an increased ability to help others (*N* = 3).

Figure 10. *Help Others* Dendogram



Unsure. The majority of students' responses to the term *unsure* were included the concepts *I*, *not*, *unsure*, *do*, *people*, and *think* (Figure 11; *N* = 99). Figure 12 displays the dendogram for this survey item.

Twenty-one students clearly stated being unsure whether they would become organ donors in the future (e.g., "whether I want to donate or not," "Not sure whether I

should register as a donor"). This is seen in the subclusters containing the concepts *I* and *not*, and *want* and *donate*. Alternately, students often expressed understanding for why other people might be unsure of whether to donate their organs (e.g., the *people* and *unsure* subcluster; *N* = 17). One student remarked, "I understand that some may be unsure of donation because they don't know much about it…." Two students were clear in his or her positions against donation: "I am sure that I am not donating" and "I do not think I would ever be an organ donor." On the other hand, nine students expressed confidence in their position in favor of OTD (e.g., "Nothing to be unsure about, it's a good cause," "sure").

Figure 11. Most Frequently used Words for *Unsure*

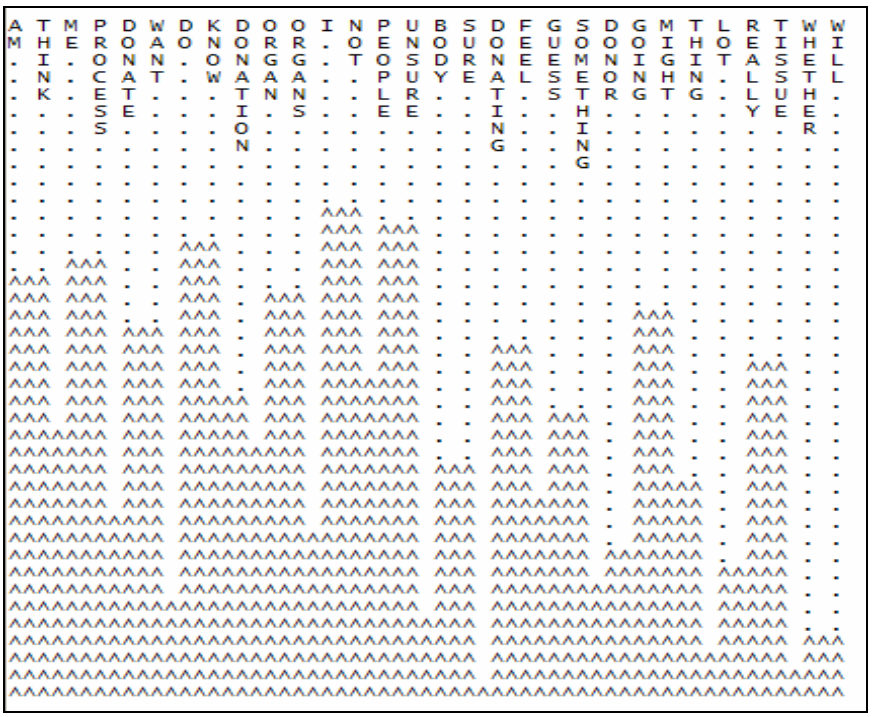
DESCENDING FREQUENCY LIST

WORD	FREQ	PCNT	CASE FREQ	CASE PCNT
I	114	19.7	463	80.7
NOT	58	10.0	323	56.3
UNSURE	52	9.0	295	51.4
DO	41	7.1	217	37.8
PEOPLE	30	5.2	179	31.2
AM	27	4.7	165	28.7
THINK	25	4.3	146	25.4
KNOW	21	3.6	129	22.5
ORGAN	19	3.3	132	23.0
ORGANS	18	3.1	119	20.7
WANT	16	2.8	105	18.3
DONATION	14	2.4	92	16.0
SURE	13	2.2	87	15.2
DONATE	11	1.9	72	12.5
LOT	11	1.9	71	12.4
FEEL	9	1.6	51	8.9
ME	9	1.6	54	9.4
PROCESS	9	1.6	56	9.8
REALLY	9	1.6	59	10.3
BODY	8	1.4	56	9.8
DONOR	8	1.4	53	9.2
WHETHER	8	1.4	56	9.8
MIGHT	7	1.2	44	7.7
SOMETHING	7	1.2	43	7.5
THING	7	1.2	49	8.5
DONATING	6	1.0	42	7.3
GUESS	6	1.0	37	6.4
TISSUE	6	1.0	42	7.3
WILL	6	1.0	41	7.1
GOING	5	0.9	35	6.1

ALPHABETICALLY SORTED LIST

WORD	FREQ	PCNT	CASE FREQ	CASE PCNT
AM	27	4.7	165	28.7
BODY	8	1.4	56	9.8
DO	41	7.1	217	37.8
DONATE	11	1.9	72	12.5
DONATING	6	1.0	42	7.3
DONATION	14	2.4	92	16.0
DONOR	8	1.4	53	9.2
FEEL	9	1.6	51	8.9
GOING	5	0.9	35	6.1
GUESS	6	1.0	37	6.4
I	114	19.7	463	80.7
KNOW	21	3.6	129	22.5
LOT	11	1.9	71	12.4
ME	9	1.6	54	9.4
MIGHT	7	1.2	44	7.7
NOT	58	10.0	323	56.3
ORGAN	19	3.3	132	23.0
ORGANS	18	3.1	119	20.7
PEOPLE	30	5.2	179	31.2
PROCESS	9	1.6	56	9.8
REALLY	9	1.6	59	10.3
SOMETHING	7	1.2	43	7.5
SURE	13	2.2	87	15.2
THING	7	1.2	49	8.5
THINK	25	4.3	146	25.4
TISSUE	6	1.0	42	7.3
UNSURE	52	9.0	295	51.4
WANT	16	2.8	105	18.3
WHETHER	8	1.4	56	9.8
WILL	6	1.0	41	7.1

Figure 12. Unsure Dendogram



Eight students commented on their lack of knowledge regarding the donation/transplantation process as the source of their uncertainty. This is illustrated in the cluster on the left-hand side of the dendogram containing the concepts *am*, *think*, *me*, *process*, *donate*, and *want*. Other students were unsure of the cause of their uncertainty regarding the topic: “I guess it’s a feeling a lot of us have due to ignorance or being naïve.”

Compassionate. Aside from the term *compassionate* and its alternate form, *compassion*, the most frequently used words in students’ responses on this item were *I*, *people*, *do*, *others*, and *think*. Figure 13 displays these results and Figure 14 displays the dendogram for *compassionate* (*N* = 101). A large cluster on the left of the dendogram (i.e., *compassionate*, *I*, *think*, *do*, *feel*, *good*, *organs*, etc.) is illustrative of students’ general consensus that donation is a compassionate act (*N* = 58). Thirty-eight

students specifically equated the donation of one's organs to the act of compassion (e.g., "those who donate are very compassionate," "means donating your organs"). This is evidenced in the small subcluster containing the terms *compassion* and *donate*.

The remaining two-thirds of the dendogram was composed of a series of subclusters. Some students *guessed* that donation was an act of compassion because it was the act of "giving of *yourself* to *help* another survive," "giving *something* to *someone* who really needs it," or *helping* those in *need*. In addition, a number of students indicated their personal compassion for those awaiting organs or "those in need" (*N* = 6), and, for eight students, the term evoked no response; these students simply stated that they "do *not know*."

Figure 13. Most Frequently used Words for *Compassionate*

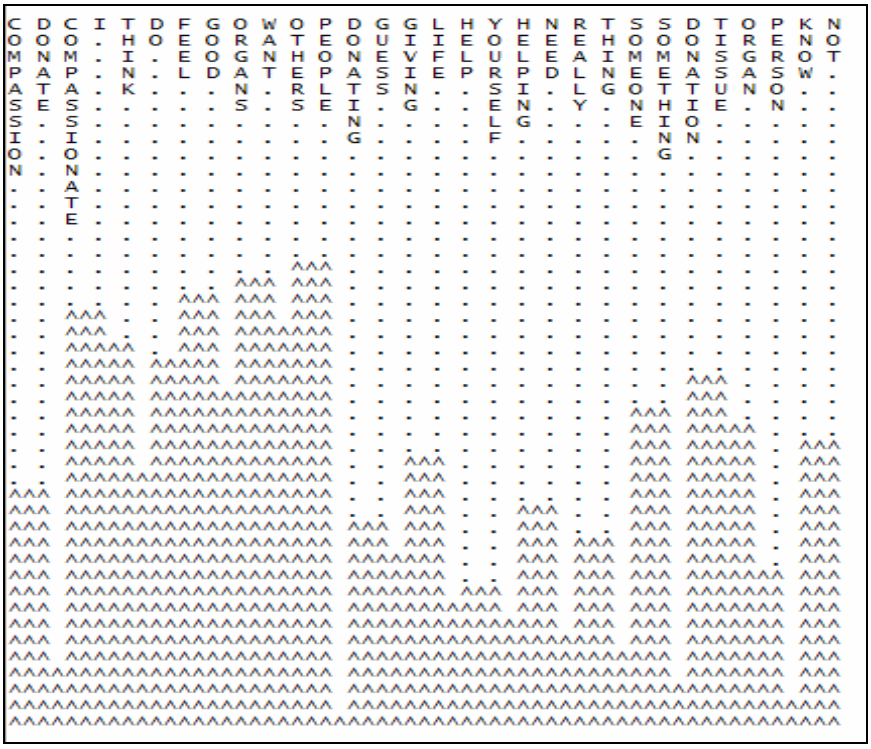
DESCENDING FREQUENCY LIST

WORD	FREQ	PCNT	CASE FREQ	CASE PCNT
I	50	12.3	229	57.4
COMPASSIONATE	34	8.4	188	47.1
PEOPLE	32	7.9	180	45.1
DO	23	5.7	151	37.8
OTHERS	21	5.2	119	29.8
THINK	19	4.7	124	31.1
COMPASSION	17	4.2	98	24.6
DONATE	16	4.0	96	24.1
NOT	16	4.0	98	24.6
ORGAN	14	3.5	77	19.3
PERSON	14	3.5	80	20.1
NEED	11	2.7	69	17.3
ORGANS	11	2.7	77	19.3
HELPING	10	2.5	63	15.8
HELP	9	2.2	58	14.5
KNOW	9	2.2	56	14.0
TISSUE	9	2.2	63	15.8
REALLY	8	2.0	51	12.8
SOMEONE	8	2.0	50	12.5
DONATION	7	1.7	49	12.3
FEEL	7	1.7	36	9.0
GOOD	7	1.7	44	11.0
LIFE	7	1.7	41	10.3
SOMETHING	7	1.7	39	9.8
THING	7	1.7	46	11.5
WANT	7	1.7	46	11.5
YOURSELF	7	1.7	49	12.3
DONATING	6	1.5	42	10.5
GIVING	6	1.5	42	10.5
GUESS	6	1.5	37	9.3

ALPHABETICALLY SORTED LIST

WORD	FREQ	PCNT	CASE FREQ	CASE PCNT
COMPASSION	17	4.2	98	24.6
COMPASSIONATE	34	8.4	188	47.1
DO	23	5.7	151	37.8
DONATE	16	4.0	96	24.1
DONATING	6	1.5	42	10.5
DONATION	7	1.7	49	12.3
FEEL	7	1.7	36	9.0
GIVING	6	1.5	42	10.5
GOOD	7	1.7	44	11.0
GUESS	6	1.5	37	9.3
HELP	9	2.2	58	14.5
HELPING	10	2.5	63	15.8
I	50	12.3	229	57.4
KNOW	9	2.2	56	14.0
LIFE	7	1.7	41	10.3
NEED	11	2.7	69	17.3
NOT	16	4.0	98	24.6
ORGAN	14	3.5	77	19.3
ORGANS	11	2.7	77	19.3
OTHERS	21	5.2	119	29.8
PEOPLE	32	7.9	180	45.1
PERSON	14	3.5	80	20.1
REALLY	8	2.0	51	12.8
SOMEONE	8	2.0	50	12.5
SOMETHING	7	1.7	39	9.8
THING	7	1.7	46	11.5
THINK	19	4.7	124	31.1
TISSUE	9	2.2	63	15.8
WANT	7	1.7	46	11.5
YOURSELF	7	1.7	49	12.3

Figure 14. *Compassionate* Dendogram



Anxiety. Responses for *anxiety* typically included terms such as *I*, *not*, *think*, *anxiety*, *do*, and *people* (Figure 15; *N* = 98). The dendogram, displayed in Figure 16, is divided into two large clusters of concepts, each with smaller subclusters.

While some (*N* = 13) students assumed that others might feel anxiety about donating their organs (e.g., the subcluster containing *anxiety* and *people*), eighteen students admitted personal anxieties regarding the idea of becoming an organ donor. The majority of responses, however, addressed anxieties regarding the donation /transplantation process (e.g., “scared of the process,” “will it go fine”; *N* = 20). However, others reported no anxiety associated with donation (*N* = 9). These responses are pictorially represented in the large cluster, and the three corresponding subclusters, on the left of the dendogram.

Figure 15. Most Frequently used Words for *Anxiety*

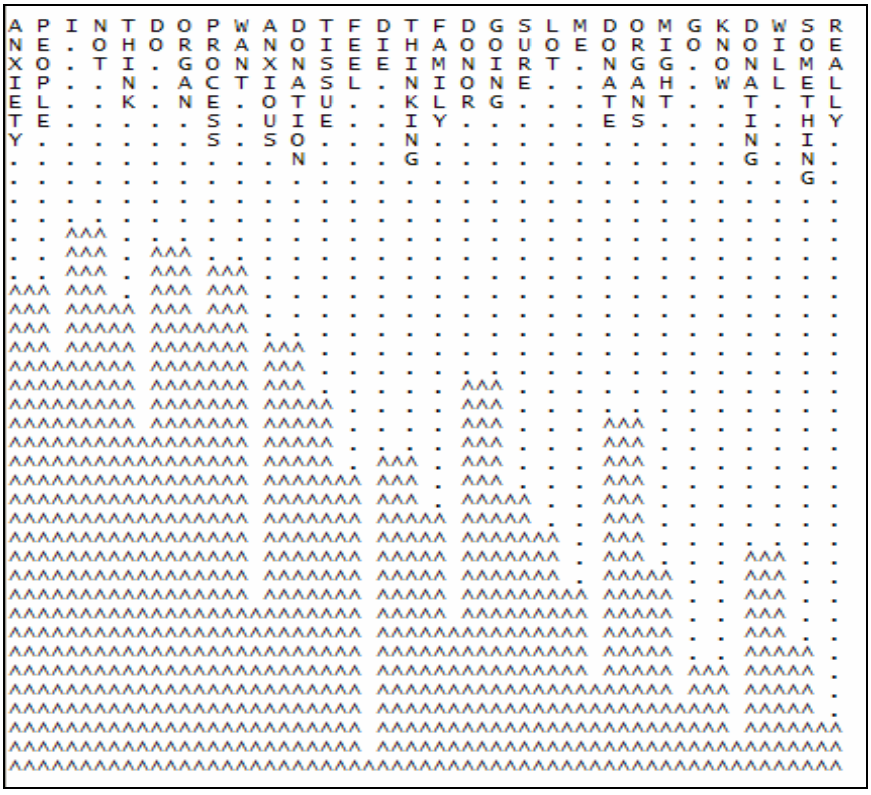
DESCENDING FREQUENCY LIST

WORD	FREQ	PCNT	CASE FREQ	CASE PCNT
I	71	15.0	344	73.8
NOT	47	10.0	270	57.9
THINK	36	7.6	207	44.4
ANXIETY	31	6.6	189	40.6
DO	30	6.4	173	37.1
PEOPLE	24	5.1	159	34.1
ORGAN	19	4.0	122	26.2
ANXIOUS	15	3.2	95	20.4
DONATION	14	3.0	90	19.3
SOMETHING	13	2.8	78	16.7
TISSUE	12	2.5	81	17.4
FAMILY	11	2.3	70	15.0
FEEL	11	2.3	77	16.5
DONATING	10	2.1	64	13.7
KNOW	10	2.1	70	15.0
REALLY	10	2.1	70	15.0
LOT	9	1.9	57	12.2
ME	9	1.9	57	12.2
MIGHT	9	1.9	55	11.8
ORGANS	9	1.9	63	13.5
WANT	9	1.9	57	12.2
WILL	9	1.9	63	13.5
GO	8	1.7	56	12.0
PROCESS	8	1.7	51	10.9
DONATE	7	1.5	49	10.5
THINKING	7	1.5	49	10.5
DIE	6	1.3	39	8.4
DONOR	6	1.3	33	7.1
GOING	6	1.3	38	8.2
SURE	6	1.3	42	9.0

ALPHABETICALLY SORTED LIST

WORD	FREQ	PCNT	CASE FREQ	CASE PCNT
ANXIETY	31	6.6	189	40.6
ANXIOUS	15	3.2	95	20.4
DIE	6	1.3	39	8.4
DO	30	6.4	173	37.1
DONATE	7	1.5	49	10.5
DONATING	10	2.1	64	13.7
DONATION	14	3.0	90	19.3
DONOR	6	1.3	33	7.1
FAMILY	11	2.3	70	15.0
FEEL	11	2.3	77	16.5
GO	8	1.7	56	12.0
GOING	6	1.3	38	8.2
I	71	15.0	344	73.8
KNOW	10	2.1	70	15.0
LOT	9	1.9	57	12.2
ME	9	1.9	57	12.2
MIGHT	9	1.9	55	11.8
NOT	47	10.0	270	57.9
ORGAN	19	4.0	122	26.2
ORGANS	9	1.9	63	13.5
PEOPLE	24	5.1	159	34.1
PROCESS	8	1.7	51	10.9
REALLY	10	2.1	70	15.0
SOMETHING	13	2.8	78	16.7
SURE	6	1.3	42	9.0
THINK	36	7.6	207	44.4
THINKING	7	1.5	49	10.5
TISSUE	12	2.5	81	17.4
WANT	9	1.9	57	12.2
WILL	9	1.9	63	13.5

Figure 16. *Anxiety* Dendogram



In regard to the second cluster, the first subcluster was formed by the terms *die*, *thinking*, and *family.* Responses utilizing these terms associated the concept *anxiety* with thoughts of death (e.g., “A lot of people would be anxious simply because it reminds them that they will one day die, sooner or later”; *N* = 12) or with donors’ families (*N* = 10). A few students were concerned with their family’s feelings regarding their becoming an organ donor: “is a feeling I get from what my family might think of me.” Others commented on the anxieties caused by making the decision to donate a loved one’s organs: “Well, I think it could be nerve racking for the family that would be donating.”

The remaining subclusters provide additional evidence of respondents’ anxiety with the procedural aspects of donation (e.g., “you never know if it’s *going* to be a complete match,” “how will I be *sure* they are getting to people who need them,” “I feel like I would be scared and nervous if anything went wrong with *me* or the person I am donating to”).

Religious objections. Figures 17 and 18 display the two Catpac outputs for the phrase *religious objections* (*N* = 100). Eight students simply reported their religious affiliations (e.g., “Jewish,” “Christian,” “against religion”), two had nothing to say on the issue (e.g., “definitely no thoughts on that,” “no comment”), and 15 were unsure of the role of religion in people’s donation decisions (e.g., “not sure,” “I am undecided”).

The majority of students, however, made clear their feelings on the topic. Nearly half (*N* = 30) of the remaining responses implicated religion as an important factor in students’ donation decisions: “plays a huge role in influencing people’s thought on tissue and organ donation,” “very important part in decision making.”

Figure 17. Most Frequently used Words for *Religious Objections*

DESCENDING FREQUENCY LIST

WORD	FREQ	PCNT	CASE FREQ	CASE PCNT
I	124	19.3	520	81.8
NOT	88	13.7	458	72.0
DO	64	10.0	358	56.3
RELIGION	33	5.1	194	30.5
KNOW	29	4.5	197	31.0
THINK	24	3.7	164	25.8
AM	22	3.4	143	22.5
RELIGIONS	21	3.3	138	21.7
RELIGIOUS	19	3.0	120	18.9
DONATION	16	2.5	109	17.1
ORGAN	16	2.5	107	16.8
AGAINST	13	2.0	91	14.3
BELIEVE	12	1.9	80	12.6
ORGANS	12	1.9	79	12.4
REALLY	12	1.9	71	11.2
TISSUE	12	1.9	84	13.2
ANYTHING	11	1.7	73	11.5
SURE	11	1.7	77	12.1
BODY	10	1.6	64	10.1
DONATE	10	1.6	61	9.6
GUESS	10	1.6	70	11.0
PEOPLE	10	1.6	68	10.7
PERSON	9	1.4	63	9.9
SOMETHING	9	1.4	58	9.1
GOOD	8	1.2	56	8.8
LIFE	8	1.2	53	8.3
LOT	8	1.2	53	8.3
CATHOLIC	7	1.1	44	6.9
HELP	7	1.1	44	6.9
ME	7	1.1	46	7.2

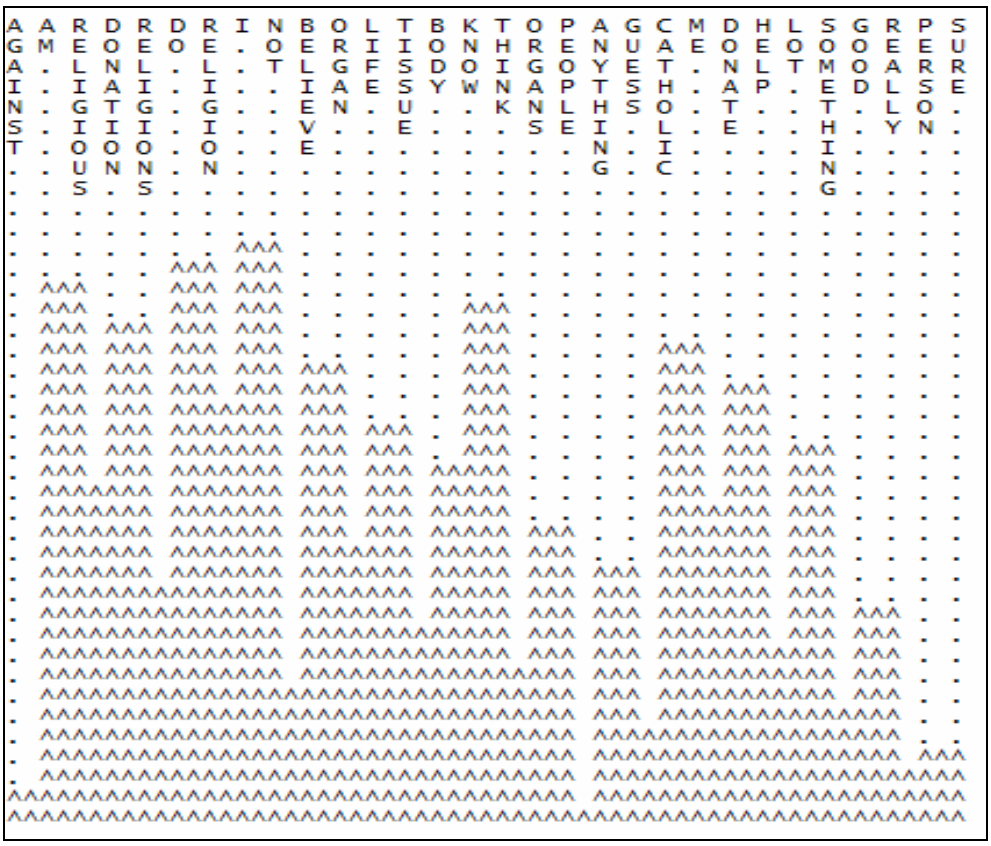
ALPHABETICALLY SORTED LIST

WORD	FREQ	PCNT	CASE FREQ	CASE PCNT
AGAINST	13	2.0	91	14.3
AM	22	3.4	143	22.5
ANYTHING	11	1.7	73	11.5
BELIEVE	12	1.9	80	12.6
BODY	10	1.6	64	10.1
CATHOLIC	7	1.1	44	6.9
DO	64	10.0	358	56.3
DONATE	10	1.6	61	9.6
DONATION	16	2.5	109	17.1
GOOD	8	1.2	56	8.8
GUESS	10	1.6	70	11.0
HELP	7	1.1	44	6.9
I	124	19.3	520	81.8
KNOW	29	4.5	197	31.0
LIFE	8	1.2	53	8.3
LOT	8	1.2	53	8.3
ME	7	1.1	46	7.2
NOT	88	13.7	458	72.0
ORGAN	16	2.5	107	16.8
ORGANS	12	1.9	79	12.4
PEOPLE	10	1.6	68	10.7
PERSON	9	1.4	63	9.9
REALLY	12	1.9	71	11.2
RELIGION	33	5.1	194	30.5
RELIGIONS	21	3.3	138	21.7
RELIGIOUS	19	3.0	120	18.9
SOMETHING	9	1.4	58	9.1
SURE	11	1.7	77	12.1
THINK	24	3.7	164	25.8
TISSUE	12	1.9	84	13.2

Such responses often included a rationale supporting this contention. Commonly cited reasons included issues of body wholeness (e.g., “many religions require you to be whole so that you can move on properly”; *N* = 7), and the church’s stance on OTD (e.g., “some religions do not approve of it”; *N* = 6).

In contrast, another 39 respondents felt that religion should not be a determining factor in one’s choice to become an organ donor. For instance, one student commented, “I don’t believe religion would play a role in organ and tissue donation. It is totally up to the person whom may be donating.” Many went so far as to state that religiosity should push people toward donation (*N* = 11). One such respondent remarked, “Any religion probably encourages donation because it signifies charity and love for other human beings.”

Figure 18. *Religious Objections* Dendogram



The large cluster, consisting of two subclusters and their corresponding subclusters, illustrates this theological division. The remaining cluster and subclusters lend further support to these themes: “it does not have *anything* to do with religion…,” “a variable, I *guess*,” “I *guess* some religions are against it,” “I thought that as a *Catholic* that I was not able to *donate*,” “I am sure it has *something* to do with religion.”

Knowledgeable. Most responses included the terms *I*, *not*, *people*, *knowledgeable*, and *do* (Figure 19; *N* = 97). Two themes emerged from students’ responses to the term *knowledgeable*. The first stressed the importance of being knowledgeable about the topic and the second acknowledged the fact that students, in general, lacked knowledge about the process (Figure 20).

Fifteen students admitted having limited information regarding organ donation and transplantation (e.g., “I feel I could use more knowledge,” “I really do not know a lot about donations other than they can save people”). Many students also thought others were uneducated on the topic (e.g., “many people are uneducated about this,” “I don’t think enough people are knowledgeable about organ and tissue donation”; *N* = 15), and that educating people on OTD would likely increase the number of donors (e.g., “Probably the more knowledge you have about it, the more willing you would be to do it,” “If people become knowledgeable about it, they will be more likely to do OTD”; *N* = 20).

Figure 19. Most Frequently used Words for *Knowledgeable*

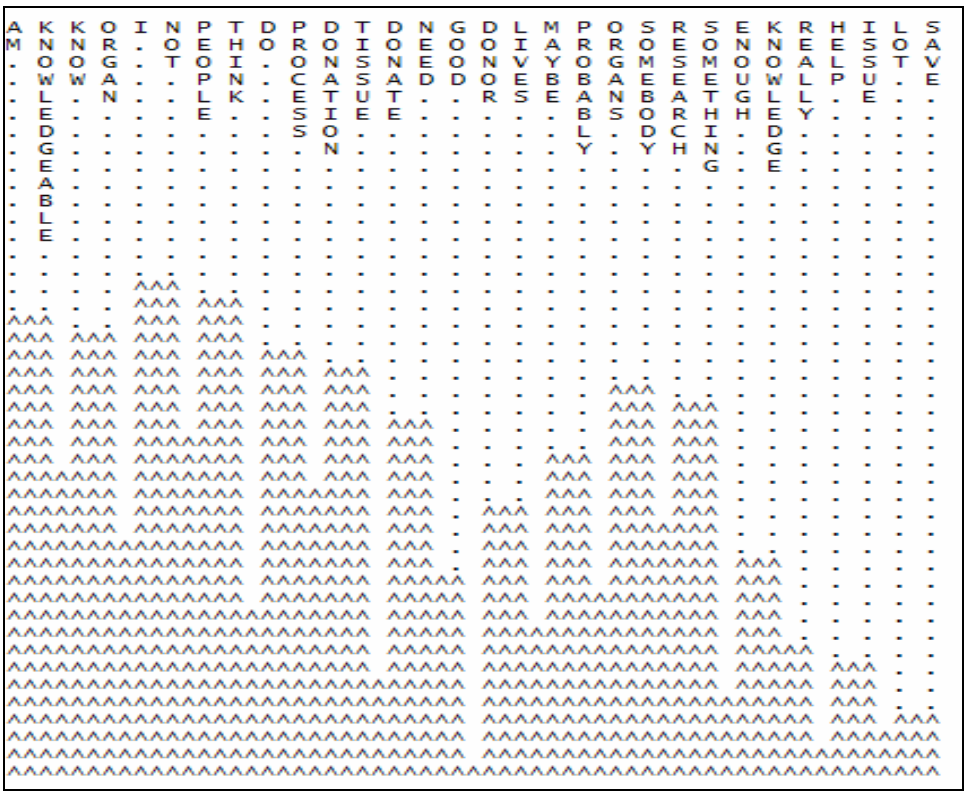
DESCENDING FREQUENCY LIST

WORD	FREQ	PCNT	CASE FREQ	CASE PCNT
I	113	19.9	434	77.1
NOT	50	8.8	300	53.3
PEOPLE	46	8.1	247	43.9
KNOWLEDGEABLE	39	6.9	237	42.1
DO	33	5.8	191	33.9
THINK	31	5.4	202	35.9
ORGAN	28	4.9	169	30.0
DONATION	26	4.6	165	29.3
KNOW	26	4.6	174	30.9
TISSUE	18	3.2	118	21.0
AM	16	2.8	101	17.9
KNOWLEDGE	11	1.9	69	12.3
NEED	11	1.9	68	12.1
HELP	10	1.8	64	11.4
LOT	10	1.8	70	12.4
DONATE	9	1.6	57	10.1
ENOUGH	9	1.6	54	9.6
REALLY	9	1.6	57	10.1
GOOD	8	1.4	56	9.9
SOMETHING	8	1.4	43	7.6
DONOR	7	1.2	45	8.0
ISSUE	6	1.1	42	7.5
LIVES	6	1.1	37	6.6
MAYBE	6	1.1	38	6.7
PROBABLY	6	1.1	42	7.5
PROCESS	6	1.1	29	5.2
SOMEBODY	6	1.1	32	5.7
ORGANS	5	0.9	30	5.3
RESEARCH	5	0.9	35	6.2
SAVE	5	0.9	35	6.2

ALPHABETICALLY SORTED LIST

WORD	FREQ	PCNT	CASE FREQ	CASE PCNT
AM	16	2.8	101	17.9
DO	33	5.8	191	33.9
DONATE	9	1.6	57	10.1
DONATION	26	4.6	165	29.3
DONOR	7	1.2	45	8.0
ENOUGH	9	1.6	54	9.6
GOOD	8	1.4	56	9.9
HELP	10	1.8	64	11.4
I	113	19.9	434	77.1
ISSUE	6	1.1	42	7.5
KNOW	26	4.6	174	30.9
KNOWLEDGE	11	1.9	69	12.3
KNOWLEDGEABLE	39	6.9	237	42.1
LIVES	6	1.1	37	6.6
LOT	10	1.8	70	12.4
MAYBE	6	1.1	38	6.7
NEED	11	1.9	68	12.1
NOT	50	8.8	300	53.3
ORGAN	28	4.9	169	30.0
ORGANS	5	0.9	30	5.3
PEOPLE	46	8.1	247	43.9
PROBABLY	6	1.1	42	7.5
PROCESS	6	1.1	29	5.2
REALLY	9	1.6	57	10.1
RESEARCH	5	0.9	35	6.2
SAVE	5	0.9	35	6.2
SOMEBODY	6	1.1	32	5.7
SOMETHING	8	1.4	43	7.6
THINK	31	5.4	202	35.9
TISSUE	18	3.2	118	21.0

Figure 20. *Knowledgeable* Dendogram



In the same vein, some students stressed the importance of being informed on the OTD process (e.g., “important to know exactly what is going on during the whole process,” “being knowledgeable about the process helps you see why organ and tissue donation is so important,” “people understand that donating saves lives”; *N* = 20).

There were, however, students who reported having sufficient knowledge of OTD (e.g., “I am knowledgeable,” “very,” “I have seen enough presentations to consider myself knowledgeable”; *N* = 11). The remainder of respondents differed in their interpretations of the term (e.g., “life is good,” “specialized in a certain area,” “research,” “doctor must be good”).

Discussion with others. Figures 21 and 22 display the word count and dendogram for the phrase *discussion with others* (*N* = 97).

Figure 21. Most Frequently used Words for *Discussion with Others*

DESCENDING FREQUENCY LIST

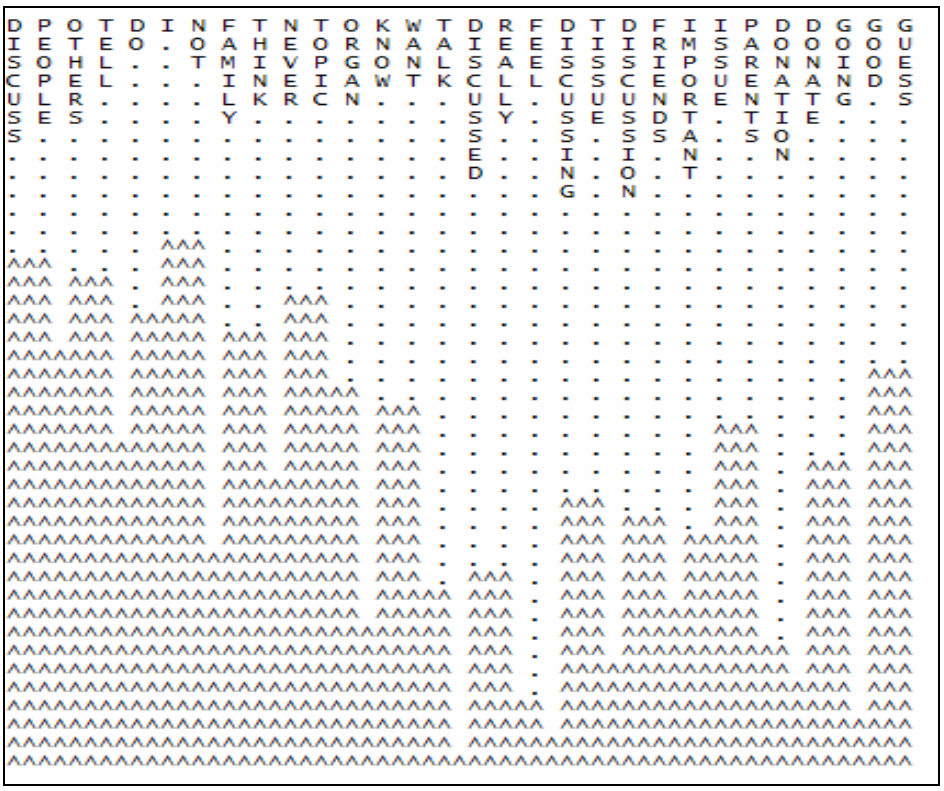
WORD	FREQ	PCNT	CASE FREQ	CASE PCNT
I	78	15.1	355	69.3
NOT	57	11.0	308	60.2
DO	34	6.6	201	39.3
PEOPLE	30	5.8	175	34.2
THINK	24	4.6	158	30.9
FAMILY	23	4.4	146	28.5
ORGAN	21	4.1	125	24.4
OTHERS	20	3.9	120	23.4
TALK	20	3.9	109	21.3
WANT	19	3.7	110	21.5
KNOW	17	3.3	115	22.5
DISCUSS	16	3.1	103	20.1
REALLY	14	2.7	91	17.8
FEEL	11	2.1	73	14.3
DISCUSSED	10	1.9	65	12.7
DISCUSSING	10	1.9	70	13.7
DONATE	10	1.9	63	12.3
NEVER	10	1.9	60	11.7
TOPIC	10	1.9	57	11.1
DISCUSSION	9	1.7	57	11.1
DONATION	9	1.7	63	12.3
FRIENDS	9	1.7	62	12.1
IMPORTANT	9	1.7	56	10.9
TELL	8	1.5	45	8.8
TISSUE	8	1.5	56	10.9
GUESS	7	1.4	46	9.0
PARENTS	7	1.4	49	9.6
GOING	6	1.2	41	8.0
GOOD	6	1.2	39	7.6
ISSUE	6	1.2	41	8.0

ALPHABETICALLY SORTED LIST

WORD	FREQ	PCNT	CASE FREQ	CASE PCNT
DISCUSS	16	3.1	103	20.1
DISCUSSED	10	1.9	65	12.7
DISCUSSING	10	1.9	70	13.7
DISCUSSION	9	1.7	57	11.1
DO	34	6.6	201	39.3
DONATE	10	1.9	63	12.3
DONATION	9	1.7	63	12.3
FAMILY	23	4.4	146	28.5
FEEL	11	2.1	73	14.3
FRIENDS	9	1.7	62	12.1
GOING	6	1.2	41	8.0
GOOD	6	1.2	39	7.6
GUESS	7	1.4	46	9.0
I	78	15.1	355	69.3
IMPORTANT	9	1.7	56	10.9
ISSUE	6	1.2	41	8.0
KNOW	17	3.3	115	22.5
NEVER	10	1.9	60	11.7
NOT	57	11.0	308	60.2
ORGAN	21	4.1	125	24.4
OTHERS	20	3.9	120	23.4
PARENTS	7	1.4	49	9.6
PEOPLE	30	5.8	175	34.2
REALLY	14	2.7	91	17.8
TALK	20	3.9	109	21.3
TELL	8	1.5	45	8.8
THINK	24	4.6	158	30.9
TISSUE	8	1.5	56	10.9
TOPIC	10	1.9	57	11.1
WANT	19	3.7	110	21.5

Some students noted the fact that this topic is not commonly brought up in everyday conversation. These students either commented on other peoples' lack of communication on the topic (e.g., "many people do not talk about this," "not many people discuss this topic"; *N* = 5), or their own (e.g., "I tend never to discuss this topic with others," "I have never discussed with others"; *N* = 20). This is in stark contrast to the five students who indicated having been a part of conversations regarding OTD (e.g., "I have discussed it with my family members and we all feel the same way"). These responses were represented in the large cluster on the left side of the dendogram.

Figure 22. *Discussion with Others* Dendogram



Responses from six students included a reason for their lack of discussion about OTD. All six referred to the decision to become a donor as a personal choice (e.g., “I really don’t need to talk about it with anyone else b/c it is my decision”). However, over three times as many students were aware of the importance of discussing one’s donation choice with other people (e.g., “letting other people know your wishes for after you die will help the decision process for when you no longer have a voice”; *N* = 19). The three subclusters containing the words *discussing*, *tissue*, *discussion*, *friends*, *important*, *issue*, and *parents* are indicative of these responses.

Students also offered their thoughts on the content (e.g., “who wants to do it. misconceptions,” “about whether or not it’s a good idea to donate”; *N* = 12) and the benefits (e.g., “learning more about the situation,” “helps decide weather or not to

donate"; *N* = 17) of such a discussion. Three responses indicated a positive reaction to the phrase, but did not offer any reasoning for the feelings (e.g., "yes," "it's necessary"). Four students had no comment.

Body Wholeness. Figures 23 and 24 display the results for the phrase *body wholeness* (*N* = 94). Fourteen students had no comment or indicated that they "don't know."

As suggested in students' responses for the phrase *religious objections*, the issue of body wholeness was a concern for many students (*N* =21). Students' reactions to the phrase included, "yes, keep my body whole," "can be important in deciding to donate," and "It's what's holding me back from donating…" Another five students replied to this phrase in a similar manner, but with less specificity (e.g., "mangled," "scary," "will be torn apart").

Figure 23. Most Frequently used Words for *Body Wholeness*

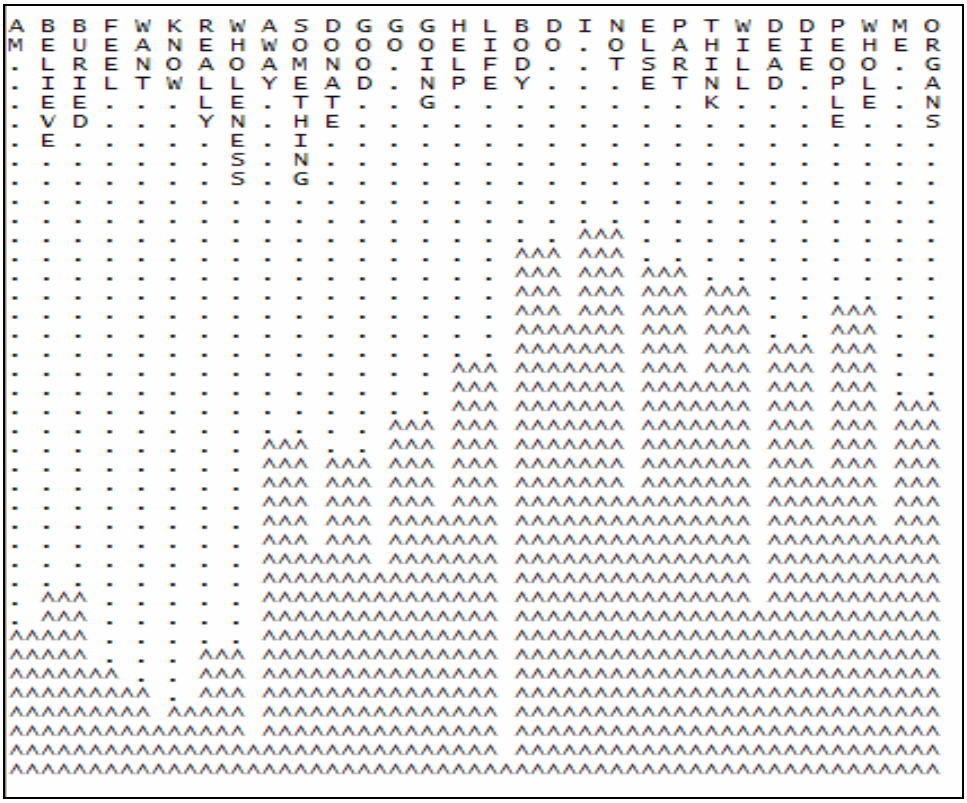
DESCENDING FREQUENCY LIST

WORD	FREQ	PCNT	CASE FREQ	CASE PCNT
I	97	19.2	397	79.6
NOT	67	13.3	366	73.3
DO	44	8.7	270	54.1
BODY	39	7.7	216	43.3
THINK	30	5.9	180	36.1
WHOLE	21	4.2	137	27.5
ME	16	3.2	110	22.0
DEAD	12	2.4	78	15.6
DIE	11	2.2	77	15.4
KNOW	11	2.2	67	13.4
ORGANS	11	2.2	76	15.2
PEOPLE	11	2.2	77	15.4
WANT	10	2.0	59	11.8
WHOLENESS	10	2.0	57	11.4
AM	9	1.8	60	12.0
FEEL	9	1.8	59	11.8
REALLY	9	1.8	63	12.6
BURIED	8	1.6	53	10.6
GOOD	8	1.6	46	9.2
WILL	8	1.6	50	10.0
HELP	7	1.4	45	9.0
LIFE	7	1.4	43	8.6
PART	7	1.4	44	8.8
SOMETHING	7	1.4	46	9.2
AWAY	6	1.2	42	8.4
BELIEVE	6	1.2	39	7.8
DONATE	6	1.2	42	8.4
ELSE	6	1.2	36	7.2
GO	6	1.2	31	6.2
GOING	6	1.2	32	6.4

ALPHABETICALLY SORTED LIST

WORD	FREQ	PCNT	CASE FREQ	CASE PCNT
AM	9	1.8	60	12.0
AWAY	6	1.2	42	8.4
BELIEVE	6	1.2	39	7.8
BODY	39	7.7	216	43.3
BURIED	8	1.6	53	10.6
DEAD	12	2.4	78	15.6
DIE	11	2.2	77	15.4
DO	44	8.7	270	54.1
DONATE	6	1.2	42	8.4
ELSE	6	1.2	36	7.2
FEEL	9	1.8	59	11.8
GO	6	1.2	31	6.2
GOING	6	1.2	32	6.4
GOOD	8	1.6	46	9.2
HELP	7	1.4	45	9.0
I	97	19.2	397	79.6
KNOW	11	2.2	67	13.4
LIFE	7	1.4	43	8.6
ME	16	3.2	110	22.0
NOT	67	13.3	366	73.3
ORGANS	11	2.2	76	15.2
PART	7	1.4	44	8.8
PEOPLE	11	2.2	77	15.4
REALLY	9	1.8	63	12.6
SOMETHING	7	1.4	46	9.2
THINK	30	5.9	180	36.1
WANT	10	2.0	59	11.8
WHOLE	21	4.2	137	27.5
WHOLENESS	10	2.0	57	11.4
WILL	8	1.6	50	10.0

Figure 24. *Body Wholeness* Dendogram



The majority of students (*N* = 45), however, felt that the issue of body wholeness was not an important aspect of their donation decisions. A few of these responses acknowledged the fact that the donation of one's organs precluded the possibility of the body remaining intact, but these individuals were not deterred by this thought: "I understand that part of my body is somewhere else, so therefore my body will not be whole. I am ok with that." For others though, body wholeness was simply not an issue: "overrated," "non existent after death," "is not an important thing to me." The remaining students answered the question in a variety of ways: "means healthy donations," "I believe in healthy living," "diet, exercise, water," "depends on religious definition but can mean many things."

Good. The results for the term *good* are displayed in Figures 25 and 26 (*N* = 97). Students frequently included the terms *good*, *I*, *do*, *think*, and *thing* in their responses. Overwhelmingly, students equated OTD with good (e.g., “Organ donation is a good thing,” “It is a good thing to do”; *N* = 44). This is evidenced in the large cluster on the right of the dendogram.

Five students had no response to the term (e.g., “no comment,” “I can’t think of anything”), and one student did “not feel good about organ donation.” Of the 45 remaining responses, two were unintelligible, and the rest offered reasons for why OTD might be considered good: “you are a good person if you donate,” “good because many lives can be saved,” “The process saves lives. There’s nothing bad about that,” “feelings come from donating.” These are displayed in the smaller peaks in the dendogram.

Figure 25. Most Frequently used Words for *Good*

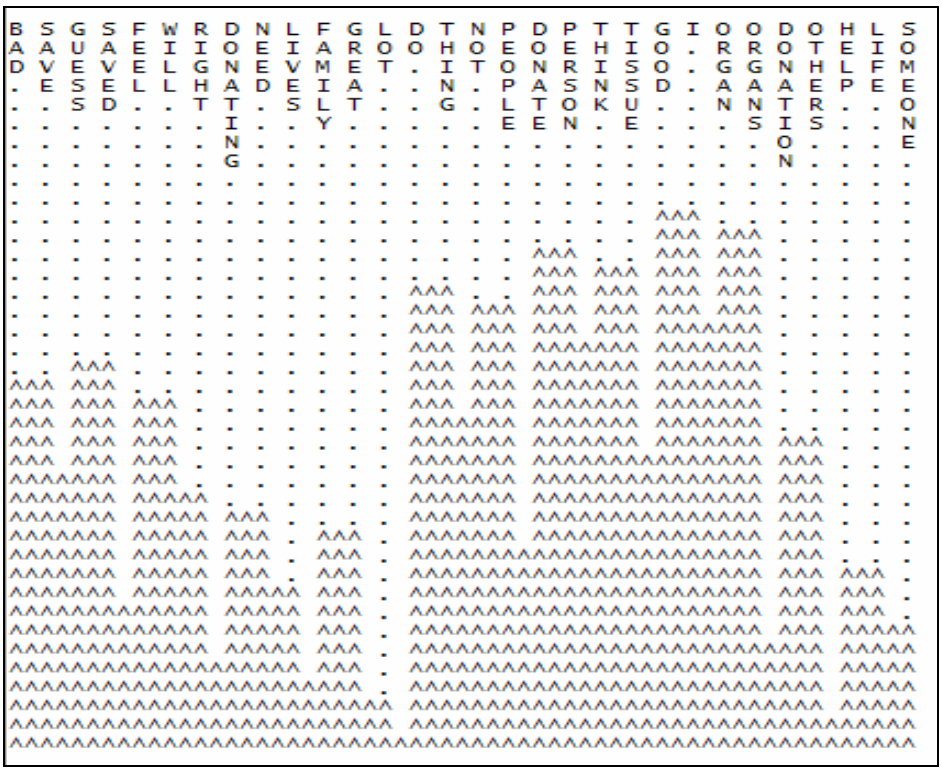
DESCENDING FREQUENCY LIST

WORD	FREQ	PCNT	CASE FREQ	CASE PCNT
GOOD	83	17.7	380	82.3
I	56	12.0	292	63.2
DO	32	6.8	180	39.0
THINK	31	6.6	181	39.2
THING	23	4.9	135	29.2
PEOPLE	19	4.1	119	25.8
NOT	18	3.8	115	24.9
ORGAN	17	3.6	110	23.8
DONATION	14	3.0	97	21.0
HELP	14	3.0	84	18.2
DONATE	12	2.6	76	16.5
LIFE	12	2.6	84	18.2
ORGANS	11	2.4	74	16.0
OTHERS	11	2.4	69	14.9
SOMEONE	11	2.4	73	15.8
TISSUE	11	2.4	71	15.4
LOT	9	1.9	48	10.4
FAMILY	8	1.7	49	10.6
FEEL	8	1.7	51	11.0
GREAT	8	1.7	52	11.3
LIVES	7	1.5	49	10.6
NEED	7	1.5	45	9.7
RIGHT	7	1.5	40	8.7
WILL	7	1.5	42	9.1
DONATING	6	1.3	38	8.2
PERSON	6	1.3	36	7.8
BAD	5	1.1	29	6.3
GUESS	5	1.1	33	7.1
SAVE	5	1.1	35	7.6
SAVED	5	1.1	35	7.6

ALPHABETICALLY SORTED LIST

WORD	FREQ	PCNT	CASE FREQ	CASE PCNT
BAD	5	1.1	29	6.3
DO	32	6.8	180	39.0
DONATE	12	2.6	76	16.5
DONATING	6	1.3	38	8.2
DONATION	14	3.0	97	21.0
FAMILY	8	1.7	49	10.6
FEEL	8	1.7	51	11.0
GOOD	83	17.7	380	82.3
GREAT	8	1.7	52	11.3
GUESS	5	1.1	33	7.1
HELP	14	3.0	84	18.2
I	56	12.0	292	63.2
LIFE	12	2.6	84	18.2
LIVES	7	1.5	49	10.6
LOT	9	1.9	48	10.4
NEED	7	1.5	45	9.7
NOT	18	3.8	115	24.9
ORGAN	17	3.6	110	23.8
ORGANS	11	2.4	74	16.0
OTHERS	11	2.4	69	14.9
PEOPLE	19	4.1	119	25.8
PERSON	6	1.3	36	7.8
RIGHT	7	1.5	40	8.7
SAVE	5	1.1	35	7.6
SAVED	5	1.1	35	7.6
SOMEONE	11	2.4	73	15.8
THING	23	4.9	135	29.2
THINK	31	6.6	181	39.2
TISSUE	11	2.4	71	15.4
WILL	7	1.5	42	9.1

Figure 26. *Good* Dendogram



Others. Data for this analysis were collected only from students interviewed (*N* = 32). Before concluding each interview, participants were asked if there were any other concepts that came to mind when thinking about the topic of organ and tissue donation. Almost half (*N* = 14) had no further thoughts on the topic. Additional terms suggested by the remaining students included, *funeral*, *family*, *helpful*, *brain dead*, *knowledgeable*, *awareness*, and *duty*.

Phase Three

Participants

As in phase two, a convenience sample was used in this phase of the research. Invitations for participation in phase three were extended to students enrolled in one section (section A) of an introductory Communication course at the State University of New York at Buffalo. The research was advertised, via an in-class announcement, as,

"An Investigation of Attitude Measurement." The course requires all students to complete four (4) credit hours of departmental research as a means of introducing students to the scientific process. For their voluntary participation in this research, students were awarded one credit (i.e., one hour) toward meeting the research requirement.

Procedures

Students were again provided with instructions for accessing a website for the online completion of the survey questionnaire during the in-class announcement. All students were asked to access the same website, located on *SurveyMonkey.com*, containing paired comparison, Likert, OTD, and demographic questions. These measures served as a baseline assessment of students' attitudes and attitudinal structures regarding OTD.

Measures

A 55-item pair-comparison instrument was constructed using the results from phase two. Ten concepts (e.g., words or phrases) in students' responses to the open-ended questions asked in phase two, as determined through the analysis of data collected in phase two, were chosen for use in the pair-comparisons. These concepts were *unsure*, *family*, *discussion with others*, *good*, *help others*, *moral obligation*, *knowledgeable*, *compassionate*, *religious objections*, and *organ and tissue donation.* The terms *unsure*, *good*, *help others*, and *knowledgeable* were included for their strong associations with OTD in students' responses in phase two. *Discussion with others* and *compassionate* were included for their propensity of use in OTD research. The decision to add *family* and *moral obligation* to the set was based on students' responses to the

final question posed during the interviews (i.e., “are there any other terms that you would add to this list?”). *Organ and tissue donation* was included for obvious reasons (i.e., it is the attitude object). An additional term, *yourself,* was included as a self-referential concept (Woelfel, 1990; Woelfel & Fink, 1980) for a total of 11 phrases and concepts.

Each question on the measure asked students to indicate how far apart one concept was from another in the set (e.g., how far apart are *Unsure* and *Family*?). Students were given the following instructions for completing the pair-comparison questionnaire:

> *The following questionnaire asks you to give your opinion on a set of ideas in regard to the topic of organ and tissue donation. Please give your opinions by indicating how different pairs of concepts are. Distance between concepts is measured in units, so that the more different two concepts are, the more units apart they are.*
>
> *To give you a “yardstick” to enable you to express how far apart two concepts are, we will say that Religious Objections is 100 units different from the concept Help Others, or the concepts Religious Objections and Help Others are 100 units apart. In other words, all the differences between Religious Objections and Help Others together account for 100 units of difference.*
>
> *The idea is for you to tell us your opinion of how many units apart the concepts which follow are from each other. Remember, the more different the two concepts are from each other, the larger the number of units apart they are. If you think any pair of concepts are more different than Religious Objections and*

Help Others, you would write a number larger than 100. If you think they are twice as large, write 200. If you think they are less different than Religious Objections and Help Others, you would write a number smaller than 100. For example, if you perceived then as one-half as large, write 50. If you think the two concepts are identical, that is, they are the same thing, you would write a"0". You can write any number you want.

A 10-item Likert scale assessed respondents' attitudes toward organ donation. Scale items were those originally developed by Goodmonson and Glaudin (1971); subsequent research has found them to be both reliable and valid (*cf*., Feeley & Servoss, 2005; Horton & Horton, 1991; Kopfman & Smith, 1996; Marshall & Feeley, in press; Morgan & Miller, 2001). All items were measured on a 5-point scale (i.e., 1 = *strongly disagree* to 5 = *strongly agree*) and included, "Organ donation allows something positive to come out of a persons' death", "I support the idea of organ and tissue donation for transplantation purposes", "I believe that organ and tissue donation is an act of compassion", and "Generally speaking, my attitude toward organ and tissue donation is positive." Cronbach's alpha for the scale was 0.87.

Two questions assessed students' behaviors toward donation. The first asked, "Have you signed an organ donor card or enrolled in the NYS Organ and Tissue Donor Registry as an indication of your intent to be an organ donor?" *(Yes / No*) and the second, "If you have not, do you intend to do so?" (*Yes / No / Unsure*).

Four final demographic questions were included to assess respondents' major, age, gender, and race.

Analyses of the pair-comparison measures were performed using Galileo Version 5.6 (V56). Any subsequent tests performed on the pair-comparison measures used SPSS 13.0.

Galileo

Galileo V56 is a program for the multidimensional scaling of pair-comparison data (Woelfel & Fink, 1980). Using the pair-comparisons, Galileo generates means and standard deviations for the perceived distance (i.e., difference) between each pair of concepts. The program also provides standard errors, skewness and kurtosis indices, minimum and maximum values, and an estimation of the error for each pair.

Then, Galileo converts the mean differences into multidimensional space. A matrix of scalar products is computed by premultiplying the matrix of distances by its transpose (Woelfel, 1980). A principle components factor analysis of the scalar matrix is also performed to generate a series of eigenvectors to be used in graphing the concepts along with their reference axes in multidimensional space (Barnett, 1988a; Woelfel, 1980).

Multidimensional scaling offers researchers the unique opportunity to glimpse individuals' cognitions regarding organ donation and the decision to become an organ donor through the generation of cognitive or perceptual maps. Cognitive maps visually display the structure of OTD attitudes in multidimensional space. The program Thoughtview was developed for this purpose. When comparing two or more cognitive maps, Galileo V5.6 performs rotations such that each map is centered at the same point of origin (Barnett, 1988a; Woelfel, 1990).

The use of the Galileo software provides the additional feature of the Automatic Message Generator (AMG). The AMG generates a list of the ten belief (i.e., concept) combinations which most effectively move two concepts closer together (Barnett, 1988a; Woelfel, 1990). Used in the context of organ and tissue donation, the AMG provides a listing of concept combinations that will move *yourself* and *organ donation* closer together (i.e., that will stimulate attitude change in the direction of donation).

Prior research using the Galileo software includes Barnett's (1988a) and Lee and Barnett's (1997) analyses of organizational culture, Fink and Chen's (1995) study on organizational climate, Barnett, Serota, and Taylor's (1976) and Serota, Cody, Barnett, and Taylor's (1977) investigation of the effects of political campaigns and attitude change, and Canan and Hennessy's (1989) assessment of tourism on the Hawaiian island of Moloka'i. Barnett, Wigand, Harrison, Woelfel, and Cohen (1981) used the program in a study on media and culture and Dinauer and Fink (2005) recently used the Galileo software to test a hierachical model of attitude structure against a spatial-linkage model.

Results

One hundred sixty-five students completed the baseline measure. It was evident that two students did not follow directions before completing the questionnaire; their responses were excluded from the analyses. In an effort to increase the normality of the data, outlying values were also excluded from the analyses.[3]

The sample was predominantly Caucasian and male, and the average age was 20.34 (*SD* = 2.87) years. Most students were Business Administration (*N* = 51),

[3] A truncation procedure was used to identify and exclude outliers in the data. Any value greater than [*M* + (3 * *SD*)], where *M* was the largest mean in the dataset and *SD* the largest standard deviation; using this formula, values greater than or equal to 580 were removed.

Communication (*N* = 48), or Psychology (*N* = 12) majors. Most students were not registered as organ donors (*N* = 118, 75.2%) and were unsure of their future intentions toward becoming donors (*N* = 64, 54.2%). Of those who were registered or card-carrying donors 25 were male and 14 female. Donors were disproportionately White (N = 35), however two were of Hispanic/Latino descent and the remaining three represented each of the other ethnicities surveyed (e.g., African American, Asian, Other).

Students' attitudes toward organ and tissue donation were generally positive (*M* = 3.99, *SD* = .62). However, responses to three survey items were less so. Some students, for example, did not consider "OTD as a natural way to prolong life" (*M* = 3.67, *SD* = 1.01), nor did they all find OTD "a safe, effective practice" (*M* = 3.71, *SD* = .85). In fact, many students thought "OTD a frightening activity" (*M* = 3.26, *SD* = 1.15). Donors (*M* = 4.32, *SD* = .51) had significantly higher attitude scores than nondonors (*M* = 3.88, *SD* = .61), t (155) = 4.05, p <.01, η^2 = .39. In addition, students intending to become donors in the future reported significantly more favorable OTD attitudes (*M* = 4.41, *SD* = .35) than did students with no such intent (*M* = 3.36, *SD* = .61); Likert-scaled attitudes of students unsure of their future OTD plans (*M* = 3.97, *SD* = .47) were significantly higher than those of students indicating no desire to become organ donors, F (2, 115) = 7.76, p < .01, η^2 = .35.

A multiple logistic regression analysis was performed to determine the predictive abilities of students' attitudes, age, gender, and race on students' donation decisions. After deletion of nine cases with missing values, data from 155 students were used in the analysis: 39 donors (*M* = 4.32, *SD* = .51) and 116 nondonors (*M* = 3.88, *SD* = .61).

The omnibus test was significant, χ^2 (7) = 33.48, p < .01, indicating that the four predictors, taken together, distinguished between donors and nondonors. The model accounted for 19% of the variance in donor status (R^2 = .19). According to the Wald criterion, attitudes, z = 14.65, p < .01, *OR (odds ratio)* = .18, *95% CI* = .07 - .43, and age, z = 6.81, p < .01, *OR* = .82, *95% CI* = .71 - .95, reliably predicted donor status such that the likelihood of being an organ donor was associated with strong positive attitudes (B = -1.74) and increased age (B = -.20).

A multiple linear regression, using the same combination of variables, was performed for students' intentions toward becoming donors. The analysis included data from 116 students: 21 intended donors (M = 4.41, SD = .35), 33 with no intentions toward donation (M = 3.36, SD = .61), and 65 unsure (M = 3.97, SD = .47). This was not significant, F (4, 111) = .94, p = .44. The Likert attitudes were not found to predict students' intentions to become donors, nor did students' race, age, or gender.

Table 2 presents the means and standard deviations for the 55 pair-comparison baseline measures. The mean relative error of the pair-comparison values was 7.6%. The mean reported perceived difference between the pairs was 75.90 (mean SD = 35.67). The concepts perceived as being furthest apart were *unsure* and *knowledgeable* (M = 140.92, SD = 97.52), and *unsure* and *compassionate* (M = 124.38, SD = 79.20). The closest concepts were *family* and *good* (M = 42.20, SD = 45.75), and *family* and *yourself* (M = 40.91, SD = 60.96).

Students in the baseline sample aligned themselves with *family* (M = 40.91, SD = 60.96), and distinguished themselves from *religious objections* (M = 113. 29, SD = 108.60). Two other terms rated as being close to the concept *yourself* included,

Table 2. Pair-Comparison Means and Standard Deviations for Baseline Sample

Concept	*UNS*	*FAM*	*DWO*	*GD*	*HLP*	*MOR*	*KNW*	*COM*	*REL*	*OTD*	*YOU*
Unsure (UNS)		85.51	69.37	70.24	68.13	71.50	97.52	79.20	80.55	82.05	79.27
Family (FAM)	122.69		72.76	45.75	50.20	55.36	52.28	57.48	83.90	80.23	60.96
Discussion with Others (DWO)	87.91	81.48		64.26	48.29	62.65	58.25	80.08	76.94	74.42	64.13
Good (GD)	112.53	42.20	68.06		55.48	67.34	68.80	62.49	76.81	68.44	51.46
Help Others (HLP)	107.76	52.37	61.12	43.42		68.55	77.00	62.17	78.31	56.68	65.66
Moral Obligation (MOR)	106.64	49.59	81.08	52.53	53.20		73.52	77.60	76.78	69.85	65.63
Knowledgeable (KNW)	140.92	60.94	70.92	60.50	76.25	88.93		76.23	91.89	87.26	68.79
Compassionate (COM)	124.38	42.77	79.66	43.50	45.97	75.93	83.58		80.62	72.19	65.91
Religious Objections (REL)	107.36	93.01	104.78	94.55	101.58	91.16	104.08	106.21		93.09	108.91
Organ and Tissue Donation	100.47	84.06	101.40	57.27	47.81	77.02	91.82	63.16	110.26		81.21
Yourself (YOU)	94.33	40.91	68.55	43.61	56.19	63.61	57.01	51.71	113.57	79.04	

Note: *N* = 163; Means are displayed to the left of the diagonal; Standard deviations are displayed to the right of the diagonal.

good (*M* = 43.61, *SD* = 51.46) and *compassionate* (*M* = 51.71, *SD* = 65.91). The phrase *organ and tissue donation* was closely associated to the term *good* (*M* = 57.27, *SD* = 68.44) and the phrase, *help others* (*M* = 47.81, *SD* = 56.68), moderately associated with to *yourself* (*M* = 79.04, *SD* = 81.21), and far removed from the phrase *religious objections* (*M* = 110.26, *SD* = 93.09).

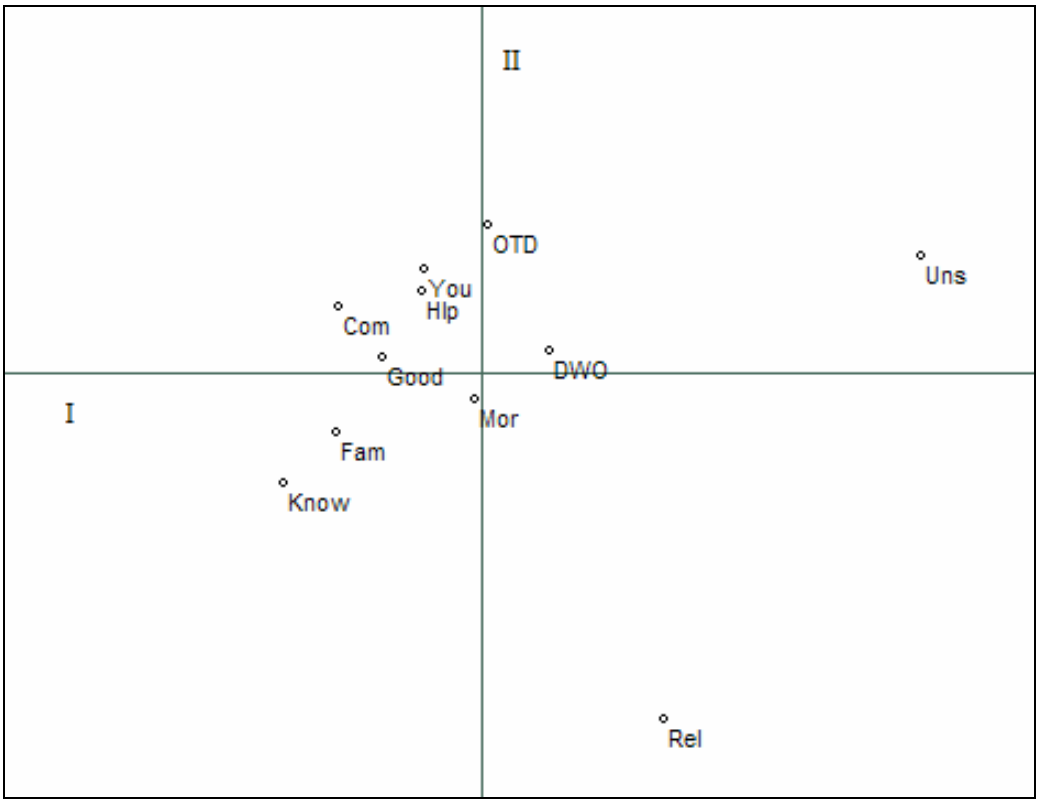
Overall, students perceived themselves as being good, compassionate, and family oriented. While students appeared to have moderate inclinations toward donation, they had engaged in little communication about the topic with others. Finally, students had few religious objections toward OTD. Figure 27 displays the cognitive map of students' overall perceptions of organ and tissue donation at baseline, which serves as a pictorial representation of students' attitude structure regarding OTD. Though eleven dimensions were extracted from the pair-comparison data, three dimensions accounted for most of the variance among the concepts (61.2%). The first dimension differentiated between *knowledgeable* and *unsure*; the second distinguished *religious objections* from *OTD*. A third dimension not displayed in the map in Figure 27 differentiated between *discussion with others* and *OTD*. The eigenvalues and coordinates for each concept can be found in Table 3.

Next, the sample was segmented by donor status and intentions toward donation. The pair-comparison means for each group are presented in Table 4. Donors, gave smaller evaluations than nondonors for the comparisons of the concept *unsure* to *OTD* (*M* = 95.98, *SD* = 65.11), and *yourself* (*M* = 85.10, *SD* = 76.04). However, the difference between donors (*M* = 177.00, *SD* = 139.16) and nondonors (*M* = 128.74, *SD* = 76.74) was significant for only *unsure* and *knowledgeable*, *Welch F* (1, 47.15) = 2.09,

$p < .05$, $\eta^2 = .08$.[4] In addition, donors perceived the phrase *religious objections* further from all other concepts than did nondonors, though not to any degree of significance.

Three other significantly different evaluations were found. The first was between donors' ($M = 50.38$, $SD = 35.50$) and nondonors' ($M = 74.80$, $SD = 70.56$) comparisons of the phrases *discussion with others* and *good*, *Welch F* (1, 133.50) = -2.86, $p < .01$, $\eta^2 = .06$. The difference between donors' ($M = 83.18$, $SD = 70.75$) and nondonors' ($M = 107.43$, $SD = 74.91$) evaluations of the difference between discussion with others and OTD approached significance, F (1, 159) = -1.80, $p = 0.07$. The last was for the comparison of *OTD* and *yourself*, F (1, 158) = -1.79, $p = .07$; the difference between

Figure 27. Overall perceptions of Organ and Tissue Donation (Baseline)



[4] The Welch *F* statistic was used for all tests in which the assumption for equality of variances was not met (Hayes, 2005).

Table 3: Coordinates and Eigenvalues of OTD Space (Baseline)

	Coordinates										
Concept	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*
Unsure	87.93	-23.29	9.23	2.58	-10.98	3.79	-0.74	-0.19	-0.54	-2.01	17.19
Family	-28.81	12.19	-2.33	23.66	-7.60	9.16	-7.19	0.06	-2.45	-11.28	-2.93
Discussion w/ Others	13.99	-4.29	47.16	-6.72	27.47	-0.46	2.71	-0.03	1.50	-3.51	-16.37
Good	-19.57	-2.71	-5.77	-1.91	-0.78	-2.52	21.16	0.04	-3.99	-0.07	4.18
Help Others	-11.79	-16.25	-10.30	-3.84	22.69	-7.41	-11.74	0.03	-4.72	5.68	6.82
Moral Obligation	-0.93	5.68	-14.82	33.71	5.75	-27.93	2.01	0.00	3.83	1.67	4.07
Knowledgeable	-39.50	22.16	31.26	-25.37	-15.86	-12.45	-3.69	0.09	1.45	-0.09	18.02
Compassionate	-28.23	-13.04	-15.70	0.98	10.92	32.43	1.56	0.06	3.94	2.06	12.67
Religious Objections	36.70	69.23	-18.94	-7.49	0.80	8.11	-0.64	-0.08	-0.35	3.40	-8.89
Organ and Tissue Donation	1.60	-29.25	-40.44	-29.24	-7.44	-10.01	-1.52	-0.00	1.70	-4.17	-15.48
Yourself	-11.39	-20.43	20.65	13.63	-24.96	7.30	-1.93	0.03	-0.37	8.32	-19.26
Eigenvalues (roots) of eigenvector matrix	13,117	7,740	6,317	3,507	2,531	2,366	672	-0.06	-82	-281	-1,827
Percentage of variance accounted for by factor	38.51	22.72	18.55	10.30	7.43	6.95	1.97	0.00	0.24	0.83	5.36
Sum of Roots	34,059.34										

Note: *N* = 163.

Table 4. Mean Distances for Pair-comparison Items by Donor Status and Intentions to Donate

Concept Pair		Donor Status		Intention to Donate		
		Donor	*Nondonor*	*Yes*	*No*	*Unsure*
Unsure	Family	114.63	125.12	106.74	126.91	130.71
Unsure	Discussion w. Others	87.75	87.77	82.39	84.76	91.20
Unsure	Good	114.73	111.69	114.13	112.55	110.38
Unsure	Help Others	104.10	108.69	92.61	102.91	117.31
Unsure	Moral Obligation	99.63	109.16	99.61	98.15	118.12
Unsure	Knowledgeable	177.00	128.74*	123.65	110.22	139.66
Unsure	Compassionate	135.85	120.55	105.70	119.56	126.29
Unsure	Religious Objections	119.53	103.46	100.26	91.58	110.63
Unsure	OTD	95.98	102.93	97.39	96.94	107.85
Unsure	Yourself	85.10	98.04	93.52	107.70	94.74
Family	Discussion w. Others	69.85	85.88	62.91	75.81	98.97
Family	Good	42.53	42.50	36.43	38.55	46.66
Family	Help Others	48.78	54.06	40.83	68.85	51.23
Family	Moral Obligation	46.43	51.18	44.26	46.97	55.94
Family	Knowledgeable	66.68	59.14	43.30	65.36	61.58
Family	Compassionate	47.25	41.70	38.78	43.36	41.89
Family	Religious Objections	110.00	86.86	75.61	83.76	92.42
Family	OTD	67.05	90.67	60.48	98.75	97.37
Family	Yourself	44.25	40.40	26.17	43.52	43.91
Disc.	Good	50.38	74.80*	51.32	65.39	87.52[a]
Disc.	Help Others	53.73	64.24	54.65	67.06	66.20
Disc.	Moral Obligation	78.23	82.21	71.39	80.27	87.02
Disc.	Knowledgeable	77.08	69.60	54.61	62.27	78.63
Disc.	Compassionate	79.73	79.93	58.09	92.73	81.15
Disc.	Religious Objections	109.95	103.56	100.87	96.91	107.95
Disc.	OTD	83.18	107.43[a]	97.83	96.85	116.20
Disc.	Yourself	61.23	70.97	48.13	69.21	79.94
Good	Help Others	52.75	40.33	23.87	45.85	43.35
Good	Moral Obligation	45.55	54.84	38.96	48.12	63.88
Good	Knowledgeable	67.60	58.15	50.00	49.18	65.58
Good	Compassionate	40.73	44.41	25.00	35.33	55.89
Good	Religious Objections	100.58	92.53	82.48	86.52	99.35
Good	OTD	44.60	61.45	36.74	62.88	69.48
Good	Yourself	38.28	45.34	47.57	36.45	49.13
Help	Moral Obligation	37.98	58.23	39.17	43.18	72.62*
Help	Knowledgeable	90.55	71.52	44.30	76.36	78.69
Help	Compassionate	49.60	44.76	26.26	43.31	52.02
Help	Religious Objections	124.13	94.18	77.39	75.19	109.72
Help	OTD	38.53	50.90	28.26	45.03	61.80

Table 4. Mean Distances for Pair-comparison Items by Donor Status and Intentions to Donate

Concept Pair		Donor Status		Intention to Donate		
		Donor	*Nondonor*	*Yes*	*No*	*Unsure*
Help	Yourself	58.65	55.37	34.61	54.64	63.09
Moral	Knowledgeable	95.40	86.79	76.09	89.18	89.35
Moral	Compassionate	69.00	78.22	66.91	70.97	85.91
Moral	Religious Objections	99.70	88.31	75.74	64.75	104.35*
Moral	OTD	72.28	78.59	62.96	71.45	87.74
Moral	Yourself	69.00	61.83	54.17	61.48	64.71
Know	Compassionate	88.95	81.81	56.96	80.64	90.12
Know	Religious Objections	119.67	98.97	90.95	77.97	112.56
Know	OTD	94.28	91.01	70.65	83.06	102.25
Know	Yourself	55.43	57.53	39.26	48.06	68.80
Comp	Religious Objections	124.25	100.19	93.78	83.12	111.30
Comp	OTD	62.58	63.35	37.00	61.12	73.80[a]
Comp	Yourself	60.80	48.70	33.70	46.61	55.08
Religious	OTD	106.63	111.46	102.43	107.52	116.66
Religious	Yourself	112.89	113.79	101.00	108.64	120.92
OTD	Yourself	59.30	85.62[a]	45.52	113.94	85.86*
N		*40*	*120*	*23*	*33*	*65*

Note: * Statistically significant difference among the groups $p < 0.05$; [a] Marginally significant difference between the groups.

donors' (*M* = 59.30, *SD* = 86.73) and nondonors' ratings (*M* = 85.62, *SD* = 78.56) also approached significance.[5]

Figure 28 displays the map of donors' and nondonors' perceptions of OTD.[6] Tables 5 and 6 present the rotated coordinates for donors and nondonors, respectively. The two dimensions displayed on the map of donors and nondonors explain 77.85% and 68.32% of the variance in students' evaluations of the pair-comparisons, respectively. In the map, dimension one distinguishes between *unsure* and *knowledgeable* and dimension two between *religious objections* and *OTD*. Again, a third dimension accounted for 14.44% of the variance for donors and 20.01% for nondonors; the dimension distinguished between *discussion with others* and *compassionate* and *discussion with others* and *OTD*, respectively.

Table 7 displays the distance each concept moved between donors' and nondonors'. A comparison of the two spaces reveals the most movement of the concepts *knowledgeable* (35.30 units), *yourself* (24.14 units), *religious objections* (21.08 units), and *OTD* (18.94 units). The mean distance moved by all concepts was 16.32 units. However, correlations between the dimensions underlying donors' and nondonors' pair-comparison judgments were very high suggesting movement of the concepts occurred only along each dimension (Table 8). The only concept displaying a substantial difference in position was *yourself* (*r* = .80).

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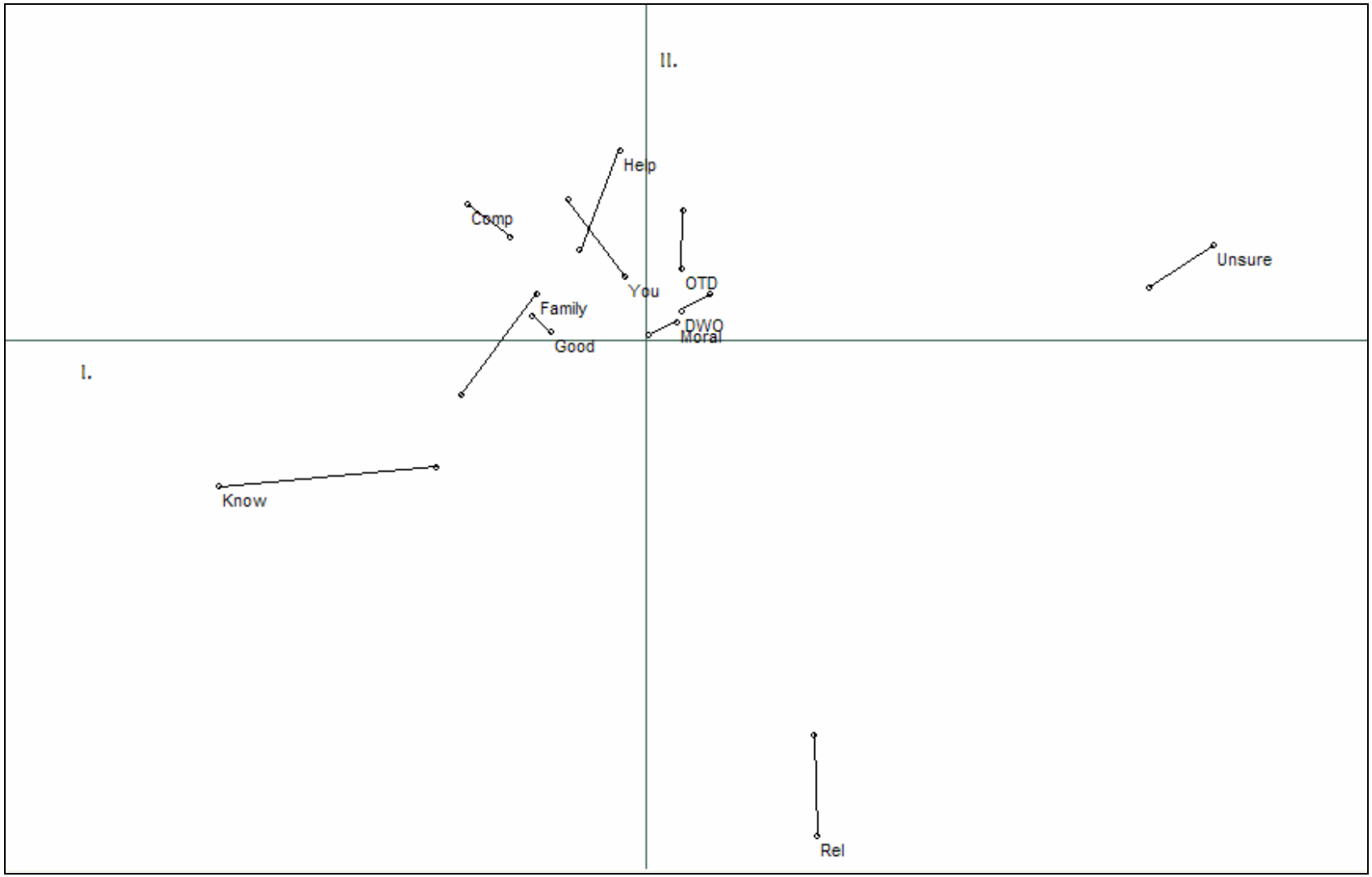
[5] It should be noted that the familywise alpha was taken into consideration while conducting these tests. Using the Bonferroni correction, to maintain a familywise alpha of 0.05 for the 55 tests of significance the per-comparison alpha is 9.32×10^{4} (Hayes, 2005). However, O'Keefe (2003a, b) makes a compelling argument for disregarding the familywise alpha. In the nature of exploring the data, O'Keefe's position was thought most appropriate.

[6] Each map was rotated for purposes of comparison. Rotation is performed using the *comparison* operation in Galileo V5.6. This command does not alter the pair-comparison evaluations in any way, but it realigns the one map with another such that any differences between the maps are true and not simply an artifact of the program (Woelfel, 1990).

Figure 28. Two-Dimensional Comparison of Donors and Nondonors



Note: The point designated by the concept term represents donors' positions; the point at the opposite end of the vector represents nondonors' positions.

Table 5. Rotated Coordinates and Eigenvalues of Donors

	Coordinates										
Concept	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*
Unsure	97.85	-16.20	14.14	1.99	-6.95	1.58	-0.38	0.31	0.06	1.93	-32.44
Family	-18.50	-7.61	-5.77	-12.94	-21.53	4.12	-12.62	7.12	0.36	-1.71	6.28
Discussion w/ Others	6.29	-4.77	40.09	-14.42	26.70	7.74	-1.91	0.58	0.16	8.51	21.15
Good	-16.10	-1.12	-4.21	3.60	5.01	8.92	19.36	4.30	1.19	-13.85	-5.01
Help Others	-4.24	-32.26	-10.76	-8.32	15.56	-16.63	-7.88	-2.53	-1.08	-20.33	-1.16
Moral Obligation	5.69	-2.77	-24.83	-32.08	-8.67	-12.63	9.80	-2.49	0.31	13.12	7.93
Knowledgeable	-73.30	25.21	25.37	2.89	-3.00	-11.92	-0.78	-1.40	-0.15	5.32	-33.99
Compassionate	-30.38	-23.08	-25.76	5.41	5.07	27.52	-3.15	-0.36	-0.01	6.46	-10.40
Religious Objections	-29.77	85.42	-14.97	2.12	4.65	5.52	-4.90	-3.48	-0.77	-6.19	7.94
Organ and Tissue Donation	6.32	-11.99	-19.33	36.35	8.53	-15.84	-0.55	2.60	0.50	12.36	11.54
Yourself	-3.39	-10.83	26.04	15.40	-25.37	1.62	2.99	-4.63	-0.57	-5.62	28.17
Eigenvalues (roots) of eigenvector matrix	17,500	10,120	5,173	3,090	2,339	1,778	740	125	4	-1,149	-3,881
Percentage of variance accounted for by factor	48.83	28.24	14.44	8.23	6.53	4.96	2.06	0.35	0.01	3.21	10.83
Sum of Roots	35,838.09										

Note: *N* = 40.

Table 6. Rotated Coordinates and Eigenvalues of Nondonors

	Coordinates										
Concept	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*
Unsure	86.70	-8.83	20.18	10.70	-8.09	2.26	-0.98	-0.96	0.81	1.77	-14.41
Family	-31.56	9.70	-9.66	-14.84	-22.49	9.78	-4.63	-0.29	4.79	15.93	2.25
Discussion w/ Others	11.25	-7.77	46.87	-20.33	25.21	7.02	-6.58	2.18	1.27	4.85	14.36
Good	-19.39	-3.94	-6.55	5.11	1.43	2.70	21.60	-4.06	0.52	0.92	-1.74
Help Others	-11.29	-15.29	-11.98	-2.09	20.54	-6.71	-8.89	-9.41	-0.89	-3.06	-8.36
Moral Obligation	0.66	-0.58	-20.39	-33.98	-9.77	-22.23	13.30	7.77	-1.26	-4.69	-8.52
Knowledgeable	-35.83	22.16	34.07	15.2	-0.31	-16.19	-0.10	1.90	-0.68	-3.00	-14.95
Compassionate	-23.17	-17.44	-18.16	8.98	3.48	29.25	-11.35	3.08	-1.65	-6.35	-14.51
Religious Objections	29.03	68.02	-17.91	-7.70	6.36	11.99	-6.88	-3.07	-1.39	-3.84	10.54
Organ and Tissue Donation	6.66	-22.07	-34.29	40.34	14.26	-21.50	4.44	3.36	1.27	5.21	16.14
Yourself	-13.06	-23.96	17.82	-1.40	-30.61	3.61	0.07	-0.50	-2.80	-7.75	19.19
Eigenvalues (roots) of eigenvector matrix	12,391	7,417	6,768	3,636	2,648	2,471	555	178	-0.28	-481	-1,763
Percentage of variance accounted for by factor	36.64	21.93	20.01	10.75	7.83	7.31	1.64	0.53	0.00	1.42	5.21
Sum of Roots	33,821										

Note: *N* = 120.

Table 7. Movement of Concepts between Donors and Nondonors

Concept	*Movement*
Unsure	5.58i units
Family	17.13 units
Discussion with Others	8.99 units
Good	8.73i units
Help Others	14.12 units
Moral Obligation	18.06i units
Knowledgeable	35.30 units
Compassionate	7.45 units
Religious Objections	21.08 units
Organ and Tissue Donation	18.94 units
Yourself	24.14 units
Mean Distance	16.32 units

Table 8. Correlations among Corresponding Dimensions for Donor Status

Dimension	*Correlation*
1	.996228
2	.914622
3	.991501
4	.915864
5	.928930
6	.911609
7	.893389
8	.997959
9	.983293
10	.989033
11	.795430

Of particular interest is the location of the concept *yourself* for donors versus nondonors. For donors, the concept is situated near the origin and is surrounded by seven other concepts. It is also situated particularly close to *OTD*, *discussion with others*, and *moral obligation*. However, for nondonors, *yourself* is no longer the central concept. In fact, the concepts, including the term *yourself* are more spread out for nondonors than for donors; *yourself* is located on the outer edge of this cluster for nondonors.

The baseline sample was also segmented by students' intent to become donors in the future. Students who were still unsure as to whether they would become organ donors in the future reported larger evaluations of the distance between the pair-comparisons than did future donors or students with no intent to donate (Table 4). Little difference was found between students still undecided on donation and future donors' evaluations of the concepts *unsure* and *yourself*, M = 94.74, SD =83.94 and M = 93.52, SD = 68.35, respectively. Students with no inclination toward donation rated themselves as furthest from *unsure* (M = 107.70, SD = 83.98), suggesting that they are quite sure in their decision not to become an organ donor.

Students with no intentions toward donation also rated the concepts *help others, compassionate, knowledgeable,* and *OTD* further from *family* than did future donors or students still undecided. In addition, these students evaluated the difference between the phrase *religious objections* and *unsure*, *discussion with others*, *help others*, *knowledgeable*, and *compassionate* as smaller than other students in the sample. Students intending to become organ donors generally reported smaller distances between the pair-comparisons than the two other groups. Most notably, intended donors

evaluated OTD closer to the ten other concepts than students in either of the other groups. Although none of the abovementioned differences were significant, these differences speak to the perceptual inclinations of students in each of the three categories of intent.

However, four significant differences were found in students' pair-comparison evaluations based on students' intentions to donate their organs in the future. For instance, students unsure of their future intentions toward donation assigned significantly greater (M = 72.62, SD = 93.04) values to the difference between *help others* and *moral obligation* than did intended donors (M = 39.17, SD = 30.98) or students with no intentions to donate (M = 43.18, SD = 41.29), *Welsh* F (2, 74.02) = 3.26, $p < .05$, $\eta^2 = .04$. Students undecided also evaluated the distance between *moral obligation* and *religious objections* (M = 104.35, SD = 80.01) greater than students intending to become donors (M = 75.74, SD = 46.44) or those with no intentions to donate (M = 64.75, SD = 53.19), F (2, 117) = 4.09, $p < .05$, $\eta^2 = .07$.

Evaluations of the comparison of the concepts *compassionate* and *OTD* also differed significantly by intent, F (2, 64.29) = 3.96, $p < .05$, $\eta^2 = .04$. Intended donors gave significantly smaller ratings of the difference between these two concepts (M = 37.00, SD = 45.38) than did students with no intentions to donate (M = 61.12, SD = 53.85) or undecided students (M = 73.80, SD = 73.86). Finally, students' ratings of the distance between themselves (i.e., the term *yourself*) and *OTD* differed by intent. Intended donors perceived themselves as closest to *OTD* (M = 45.52, SD = 54.33), while students with no intentions toward donation rated themselves as furthest from the concept (M = 113.94, SD = 101.42); students unsure of their future intentions gave

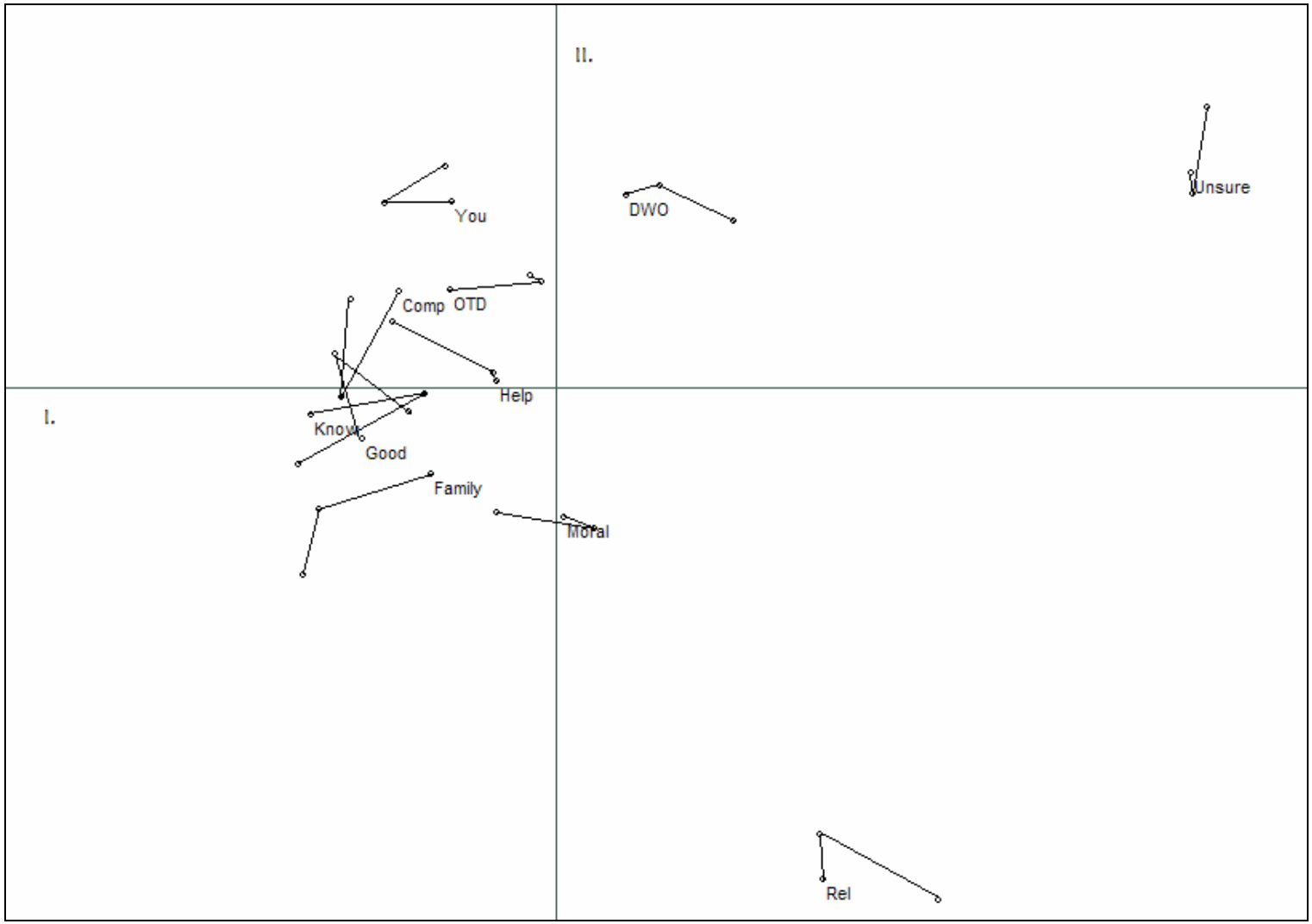
midrange ratings of the distance between these concepts (M = 85.86, SD = 67.08), *Welsh* F (2, 53.85) = 6.47, p <.01, η^2 = .09. Additionally, differences in students' evaluations of the distance between *discussion with others* and *good* approached significance, F (2, 117) = 2.64, p = .08.

Figure 29 displays the map comparing the perceptions of students intending to become donors, students with no such intentions, and students unsure of their intention toward donation. The two dimensions shown explained 70.65% of the variance in intended donors' responses, 65.63% of the variance in the responses of students with no intentions toward donation, and 56.94% of the variance of students still unsure as to whether they would become donors. A third dimension accounted for an additional 19 – 22% of the variance for each group (Tables 9 – 11).

For all three groups, a large cluster of concepts is located near the origin of the map, with the concepts *unsure* and *religious objections* located on the edges of each map, far removed from the main cluster. For intended donors the two dimensions displayed in Figure 29 distinguish between *unsure* and *knowledgeable*, and *unsure* and *religious objections*, respectively. Also, the concepts *compassionate* and *OTD* are in close proximity to one another, as are the concepts *knowledgeable*, *good*, and *family*. Furthermore, the concept *yourself* is situated rather close to both *OTD* and *discussion with others*.

The concepts in the map of students with no intent to donate their organs are more dispersed; *good*, *compassionate*, *knowledgeable*, and *help others* formed the one small subcluster in the map. The first two dimensions differentiate between *unsure* and *family* and *OTD* and *discussion with others*.

Figure 29. Two-Dimensional Comparison of Donors' Intentions



Note: The point designated by the concept term represents intended donors' positions; the midpoint represents the concept position for students with no intentions toward donation; and the point at the opposite end of the vector represents concept positions for students still undecided.

Table 9. Rotated Coordinates and Eigenvalues of Intended Donors

	Coordinates										
Concept	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*
Unsure	81.61	-27.50	6.23	-4.69	-2.54	-0.55	-0.52	0.00	0.20	-2.26	2.77
Family	-15.98	11.18	-5.81	1.05	-15.32	18.68	-0.44	0.00	-0.04	-12.41	-0.69
Discussion w/ Others	9.19	-24.64	-44.42	9.96	11.63	-1.77	-0.18	0.00	0.02	-1.01	0.05
Good	-24.74	6.69	3.64	12.13	17.70	-3.47	-2.23	0.00	-0.06	-0.73	-9.65
Help Others	-7.48	-0.80	8.84	-1.26	5.72	-11.57	2.78	0.00	-0.02	-7.54	-9.90
Moral Obligation	1.13	16.85	9.56	35.79	-11.18	-5.13	0.56	0.00	0.00	3.63	10.71
Knowledgeable	-31.44	3.54	-26.59	-21.38	-10.18	-14.04	-0.44	0.00	-0.08	0.32	11.33
Compassionate	-20.08	-12.20	8.85	-7.06	18.90	16.75	1.22	0.00	-0.05	5.18	11.06
Religious Objections	34.45	63.11	-4.80	-12.22	4.47	2.12	0.05	0.00	0.08	4.77	-4.02
Organ and Tissue Donation	-13.41	-12.51	46.96	-9.93	-0.76	-6.34	-1.07	0.00	-0.03	-1.01	2.95
Yourself	-13.25	-23.72	-3.06	-2.39	-18.44	5.32	0.27	0.00	-0.03	11.06	-14.62
Eigenvalues (roots) of eigenvector matrix	10, 603	6, 681	5, 259	2, 313	1, 667	1, 075	16	0.06	-404	-803	-1, 946
Percentage of variance accounted for by factor	43.34	27.31	21.50	9.45	6.82	4.39	0.07	0.00	1.65	3.28	7.95
Sum of Roots	24, 463										

Note: *N* = 23.

Table 10. Rotated Coordinates and Eigenvalues of Nondonors

	Coordinates										
Concept	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*
Unsure	81.97	-24.83	4.25	-10.54	-7.00	-6.12	-5.09	0.00	0.04	-5.78	1.84
Family	-30.30	15.81	-15.42	15.94	-6.96	25.02	-11.43	0.00	0.03	-10.31	-11.38
Discussion w/ Others	13.36	-25.81	-39.93	10.99	16.03	-15.32	-8.03	0.00	0.08	6.07	4.16
Good	-28.19	-4.30	2.54	1.74	-5.04	-0.35	-7.10	0.00	-0.01	-2.20	-5.90
Help Others	-8.02	-1.74	17.48	10.05	16.24	-9.91	24.24	0.00	-0.06	-10.33	-2.12
Moral Obligation	4.98	18.14	15.32	35.62	-13.04	0.16	0.83	0.00	-0.03	5.52	19.40
Knowledgeable	-16.85	0.95	-29.56	-33.83	-11.12	-19.62	-9.44	0.00	0.06	-2.06	14.90
Compassionate	-27.40	1.38	22.74	-10.92	10.98	29.62	8.54	0.00	-0.06	4.74	20.59
Religious Objections	34.01	57.52	-6.32	-13.25	4.52	2.74	4.99	0.00	0.01	4.22	-11.44
Organ and Tissue Donation	-1.67	-13.51	52.99	-10.32	22.79	-27.85	-17.23	0.00	-0.14	4.05	-14.10
Yourself	-21.90	-23.62	-24.09	4.53	-27.39	21.64	19.73	0.00	0.08	6.10	-15.96
Eigenvalues (roots) of eigenvector matrix	12, 278	8, 016	6, 244	4, 014	2, 470	1, 427	1, 089	-0.05	-29	-1, 154	-3, 432
Percentage of variance accounted for by factor	39.71	25.92	20.19	12.98	7.99	4.62	3.52	0.00	0.09	3.73	11.10
Sum of Roots	30, 923										

Note: *N* = 33.

Table 11. Rotated Coordinates and Eigenvalues of Unsure

	Coordinates										
Concept	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*
Unsure	83.76	-35.84	5.78	-2.86	-18.91	-2.25	8.52	0.00	0.00	-8.41	11.44
Family	-32.44	24.11	-6.31	3.88	-11.52	23.72	9.93	-6.25	0.00	-17.19	-5.01
Discussion w/ Others	22.86	-21.38	-45.95	12.19	29.99	-10.94	-5.77	4.27	0.00	-2.71	-12.83
Good	-18.71	3.12	8.56	-7.05	-11.56	-7.73	11.10	19.90	0.00	-1.80	-3.59
Help Others	-20.76	-8.24	8.21	6.10	25.52	-13.69	18.33	-2.91	0.00	6.22	6.95
Moral Obligation	-7.49	16.05	6.59	46.73	-16.27	-5.87	-14.75	-0.57	0.00	0.52	6.43
Knowledgeable	-33.02	9.97	-37.46	-23.89	-8.85	-22.90	-20.75	-7.96	0.00	-1.13	9.74
Compassionate	-26.14	-11.21	10.14	-5.54	24.85	33.82	2.07	5.54	0.00	-0.63	11.63
Religious Objections	49.21	65.94	-1.38	-18.50	8.07	9.73	0.74	-0.71	0.00	9.14	-3.64
Organ and Tissue Donation	-3.16	-14.35	60.29	-15.29	6.70	-18.69	-11.88	-6.62	0.00	-2.38	-9.39
Yourself	-14.10	-28.18	-8.46	4.24	-28.03	14.80	2.48	-4.69	0.00	18.36	-11.72
Eigenvalues (roots) of eigenvector matrix	13, 976	8, 584	7, 461	4, 346	3, 629	3, 118	1, 106	481	-4.30	-973	-2, 114
Percentage of variance accounted for by factor	35.29	21.67	18.84	10.97	9.16	7.87	2.79	1.21	0.01	2.46	5.34
Sum of Roots	39, 609										

Note: *N* = 65.

The phrase *religious objection* is slightly closer to the other concepts in the nondonors' space as well. A comparison of the two spaces reveals the most movement in *OTD* (33.72 units), *good* (26.76), and *compassionate* (21.72), all of which are greater than the mean 18.63 units (Table 12). The concept *yourself* moved 22.31 units, and, for students with no intent to donate, it is located further from *OTD* and *discussion with others* than for intended donors. An examination of the correlations of the dimensions revealed strong correlations for all but four dimensions (Table 13). The concepts *good*, *help others*, *compassionate*, and *yourself* saw real movement between the two spaces.

Even greater dispersion of the concepts was found in the space of students who were still undecided on their position regarding OTD. Dimension one differentiated between *unsure* and *religious objections*; dimension two distinguished between *religious objections* and *OTD*. While the concepts *compassionate* and *help others* were close together, the other concepts were spaced out across the diagonal of the map. A comparison of the spaces of students not intending to become donors and students unsure of their donation plans revealed the most movement of the concepts *good* (25.44 units), *knowledgeable* (26.13 units), and *yourself* (22.75 units; Table 12). The concepts *family* and *good* also changed position, as evidenced in the correlations of the dimensions (Table 13).

The ten Likert-scaled items differentiated between donors' and nondonors' attitudes toward OTD, as well as between students intending to donate, students with no intentions toward donation, and predicted, along with age, students' donor status. These items also provided limited information regarding students' thoughts regarding OTD in that, while on the whole students' attitudes were generally positive, many

Table 12. Movement of Concepts by Intent to Donate

	Movement	
Concept	*Intend – Do not Intend*	*Do not Intend - Unsure*
Unsure	10.24 units	19.61 units
Family	24.64 units	20.88 units
Discussion with Others	6.92i units	6.02i units
Good	26.76 units	25.44 units
Help Others	23.41 units	5.37 units
Moral Obligation	2.82i units	20.47 units
Knowledgeable	21.72 units	26.13 units
Compassionate	25.20 units	22.11 units
Religious Objections	7.16i units	15.34 units
Organ and Tissue Donation	33.72 units	18.11 units
Yourself	22.31 units	22.75 units
Mean Distance	18.63 units	18.39 units

Table 13. Correlations among Corresponding Dimensions by Intent to Donate

	Correlation	
Dimension	*Intend – Do not Intend*	*Do not Intend - Unsure*
1	.992896	.975399
2	.882268	.834777
3	.960524	.991292
4	.597396	.477436
5	.838843	.977031
6	.999480	.945324
7	.906710	.922166
8	.829642	.894425
9	.997608	.994799
10	.868952	.952204
11	.812587	.924472

considered the process unnatural and scary.

On the other hand, the pair-comparison data provided specific information regarding the cognitions of students based on group membership (e.g., donor status and intentions to donate). Donors' and intended donors' assessments of the difference between the concept *yourself* and the phrases *discussion with others* and *OTD* were smaller than assessments of the same pair-comparisons for nondonors, students with no intentions to donate, and students unsure of their intentions. This was further supported by the perceptual maps for donors and intended donors. These students also perceived of OTD as a means of helping other people and as an act of compassion. Nondonors and students with no donation intentions rated themselves furthest from *OTD*, and in many instances closest to *religious objections.* Thus, students' perceptions of their religion's position on OTD may contribute to their own decision against donation. As for students still undecided, the fact that the concepts were relatively dispersed across the map may indicate that these students have not given the topic enough consideration to be able to clearly articulate the relationships between the concepts.

Phase Four

Participants

A convenience sample was again used for this phase of the research. Invitations for participation in phase three were extended to students enrolled in two sections (B and C) of the same introductory Communication course as used in phase three. Again, the research was advertised, via an in-class announcement, as, "An Investigation of Attitude Measurement." Students in Section B of the class were recruited for participation in the treatment group (i.e., participants read a brief informational message

prior to completing the survey instrument), while students in section C were invited as participants in the control group.

Procedures

Students were again provided with instructions for accessing a website for the online completion of the survey questionnaire during the in-class announcement. All students were randomly provided with the web address for one of eight online surveys. Four of these surveys served as controls, in which the same questions as posed to students in phase three (Section A) were asked. Within the four controls, the pair-comparison items were counter-balanced (i.e., two surveys ordered the pair-comparison items first to last, two surveys ordered the items last to first), as were the pair-comparison and Likert scales. This was done to control for the potential effects of order and/or fatigue. The other four surveys asked students to read the same, brief informational message regarding OTD before completing the survey questionnaire.

The automatic message generator (A.M.G.), a feature of the Galileo software, aided in the design of the informational message (Serota, Cody, Barnett, & Taylor, 1977; Woelfel, 1990). Results from the baseline sample indicated that the most effective message, in terms of increasing donor rates (i.e., reducing the distance between the concepts *organ and tissue donation* and *yourself*) incorporated the terms *compassionate*, *help others*, and *religious objections*. Thus, the message read:

> *Below you'll find some current information regarding organ and tissue donation and transplantation. Please read through this information before completing the survey that follows.*

The majority of Americans, some estimates as high as 80 – 90% of the population, report positive attitudes toward organ and tissue donation. Many Americans feel organ and tissue donation is a good and beneficial procedure; some even consider organ and tissue donation the ultimate act of compassion.

The most commonly cited reason for becoming an organ donor is the opportunity it offers people to help others in need. Organ and tissue donation extends or improves the quality of life for thousands of people a year. In 2004 alone, 28,110 transplants were performed. But, as of March 28th, 2006 there were still 91,708 individuals awaiting a suitable organ donor.

A common misconception many people hold in regard to the topic of organ and tissue donation is that their religion does not support the practice of donation. This is largely untrue. In fact, most major religious groups approve of organ and tissue donation and consider it an act of charity. And, the Congress of National Black Churches, the Union of American Hebrew Congregations, the Presbyterian Church USA, the General Conference of the Seventh-Day Adventist Church, the Interfaith Conference of Metropolitan Washington, and other faith organizations have recently joined forces with the Department of Health and Human Services to urge congregations to consider donation.

Although all students in the treatment condition were exposed to the OTD message before responding to any questions, the order of the pair-comparison and Likert scales, and the individual pair-comparison items, were counter-balanced across the four surveys. The OTD and demographic questions were asked last on all eight online surveys.

Results

Seventy-eight students completed the treatment measure (i.e., message condition). Two students failed to complete the questionnaire and their responses were excluded from the analyses (*N* = 76). In addition, the truncation procedure explained in phase three was used to smooth the data.

The sample was predominantly Caucasian (*N* = 48), and just over half of the sample was male (*N* = 44). Only seven students (9.0%) reported being organ donors; six were female. Furthermore, the majority of donors were Caucasian (*N* = 5); the other two were of Asian descent. Another 17 (24.6%) students claimed to intend to become donors at a later date, 13 (18.8%) had no intentions to do so, and 39 (56.5%) were unsure.

The control group consisted of 91 students, five of whom either failed to follow directions before completing the questionnaire or failed to complete the questionnaire (*N* = 86). Half of the sample was male (*N* = 45). The control sample was disproportionately Caucasian (*N* = 59). Of the 13 donors (15.1%) in the sample, 9 were male, and eleven were Caucasian. Insofar as students' intentions toward donation, 20 (27.4%) students reported intending to become donors in the future, 19 (26.0%) students had no inclination toward donation, and 34 (46.6%) claimed to be unsure of their intentions. Table 14 presents the demographic breakdown of the treatment and control samples.

Students' attitudes toward donation, as measured by the ten Likert-scaled items, were equally high in both the treatment (*M* = 3.96, *SD* = .57) and control (*M* = 3.96, *SD* = .54) conditions. As was true at baseline, students in the treatment and control groups

tended not to consider “OTD as a natural way to prolong life,” nor did they all find “OTD…a safe, effective practice.” Similarly, a fair number of students thought “OTD a frightening activity.”

Across both conditions donors’ attitudes toward organ donation and transplantation were higher than those of students who were not donors, though the difference was significant in the control sample only, F (1, 84) = 7.65, $p < .01$, $\eta^2 = .08$ (Table 14). Similarly, students indicating their intentions toward becoming donors had higher OTD attitudes than students with no future donation intentions and students who were unsure whether they would ever become donors. Additionally, students who were unsure of their donation intentions had higher mean attitudes scores than did students with no donation intentions. Again these differences were only significant in the control group, F (2, 70) = 1.97, $p < .01$, $\eta^2 = .22$. There were no significant differences in attitudes between the treatment and control conditions (Table 14).

Table 15 presents the mean distances and standard deviations for the pair-comparison ratings in the treatment group. The average perceived distance was 62.44 (*SD* = 30.38). The largest distances for the treatment sample were assigned to the concepts *knowledgeable* and *unsure* (*M* = 100.84, *SD* = 87.90), and *organ and tissue donation* and *religious objections* (*M* = 98.97, *SD* = 93.21). In contrast, the smallest mean distance in the treatment sample was between the concepts *family* and *yourself* (*M*= 35.82, *SD* = 64.89). These were comparable to the baseline measure in phase three.

Also worth noting are the distances between *religious objections* and the concepts *yourself* and *OTD*. Theoretically, the treatment sample read the informational

Table 14. Likert Attitudes for Treatment and Control Groups by Demographic

	Treatment			*Control*			
	M	*SD*	*N*	*M*	*SD*	*N*	*p*
Donor Status							
Donor	4.26	.51	7	4.32[a]	.48	13	n.s.
Nondonor	3.94	.57	69	3.90	.50	73	n.s.
Intent to Donate							
Yes	4.32	.49	17	4.17[a]	.49	20	n.s.
No	3.58	.55	13	3.54	.34	19	n.s.
Unsure	3.91	.53	39	3.94	.48	34	n.s.
Gender							
Male	4.03	.58	43	3.94	.53	45	n.s.
Female	3.90	.55	33	3.99	.51	41	n.s.
Race							
Caucasian	4.05	.61	46	3.99	.50	57	n.s.
Hispanic/Latino	3.68	.33	4	3.98	.59	5	n.s.
African American	3.70	.32	7	3.93	.59	13	n.s.
Asian	3.98	.58	15	3.83	.56	7	n.s.
Other	3.90	.55	4	3.88	.58	4	n.s.
Total Attitudes	3.97	.57	76	3.96	.52	86	n.s.
Age	20.37	2.99		20.70	2.03		n.s.

Note: Significance noted as follows: [a] $p < 0.05$ between groups within condition;

Table 15. Pair-Comparison Means and Standard Deviations for Treatment Sample

Concept	*UNS*	*FAM*	*DWO*	*GD*	*HLP*	*MOR*	*KNW*	*COM*	*REL*	*OTD*	*YOU*
Unsure (UNS)		72.50	67.50	72.08	57.76	68.61	87.90	55.21	71.64	69.00	51.66
Family (FAM)	83.93		76.64	43.16	66.30	42.91	66.20	43.56	88.58	47.69	64.89
Discussion with Others (DWO)	81.50	70.84		53.82	70.45	50.94	37.59	63.41	78.85	52.94	51.26
Good (GD)	93.63	43.59	61.17		50.96	76.43	42.44	42.69	95.63	46.18	51.53
Help Others (HLP)	82.42	53.08	67.53	45.47		85.99	71.88	51.77	80.17	49.18	32.27
Moral Obligation (MOR)	83.26	46.87	77.70	65.13	60.57		47.53	69.74	98.99	59.18	65.00
Knowledgeable (KNW)	100.84	61.07	54.58	55.19	66.28	66.24		54.63	86.12	48.41	62.98
Compassionate (COM)	82.99	42.77	70.35	39.66	47.16	66.72	68.16		88.69	44.43	42.28
Religious Objections (REL)	80.77	82.50	98.53	87.51	89.76	81.60	84.97	77.34		93.21	91.95
Organ and Tissue Donation	77.80	59.86	78.76	41.89	40.11	63.04	60.80	42.43	98.97		54.43
Yourself (YOU)	71.35	35.82	63.07	45.30	37.45	52.57	58.43	38.92	91.45	56.73	

Note: $N = 76$; Means are displayed to the left of the diagonal; Standard deviations are displayed to the right of the diagonal.

OTD message before completing the survey instrument and should have acquired new knowledge regarding the church's stance on the topic. Accordingly, relatively large distances were assigned to these concept pairs: *religious objections* and *OTD* (*M* = 98.97, *SD* = 93.21), and *religious objections* and *yourself* (*M* = 91.45, *SD* = 91.95). Students' perceptions of the similarity between *religious objections* and the remaining eight concepts ranged from 77.34 to 98.53. In addition, respondents in this sample reported relatively small distances between the concept *OTD* and the terms *help others* (M = 40.11, SD = 49.18) and *compassionate* (M = 42.43, SD = 44.43). Both terms were incorporated into the OTD message, as well. The distance between *OTD* and *yourself* was moderate (M = 56.73, SD = 54.43).

The average distance assigned to the concept pairs in the control sample was 60.86 (*SD* = 28.99). Table 16 displays the mean distances and standard deviations for students' perceptions of the concept pairs for control. The pairs perceived as furthest apart by the students in the control sample were *unsure* and *family* (*M* = 119.55, *SD* = 99.31), and *unsure* and *knowledgeable* (*M* = 120.38, *SD*= 104.73). In contrast, *OTD* and *help others* and *yourself* and *good* were perceived as closest, *M* = 21.91, *SD* = 34.02, and *M* = 28.31, *SD* = 34.93, respectively. *OTD* was also perceived as being quite similar to *compassionate* (*M* = 31.35, *SD* = 41.48) and *good* (*M* = 37.78, *SD* = 49.17). Students considered themselves (i.e., the concept *yourself*) closest to the concepts *family* (*M* = 34.87, *SD* = 67.73), *help others* (*M* = 33.72, *SD* = 42.17), *knowledgeable* (*M* = 35.64, *SD* = 36.42), and *compassionate* (*M* = 31.78, *SD* = 35.88). The mean distance between *yourself* and *OTD* was 61.54 (*SD* = 73.00).

Referring back to Table 2, respondents' evaluations of the distance between

Table 16. Pair-Comparison Means and Standard Deviations for Control Sample

Concept	*UNS*	*FAM*	*DWO*	*GD*	*HLP*	*MOR*	*KNW*	*COM*	*REL*	*OTD*	*YOU*
Unsure (UNS)		99.31	92.12	84.57	80.51	85.98	104.73	87.61	86.52	59.55	87.24
Family (FAM)	119.55		63.69	42.18	39.90	45.98	59.86	48.66	60.23	73.37	67.73
Discussion with Others (DWO)	94.58	61.79		75.93	70.27	58.40	62.86	60.14	69.10	88.91	71.00
Good (GD)	98.86	32.64	59.97		67.99	46.92	50.72	40.44	64.59	49.17	34.93
Help Others (HLP)	86.85	34.27	63.87	34.94		44.18	61.58	39.80	67.76	34.02	42.17
Moral Obligation (MOR)	105.55	39.46	79.90	43.07	37.14		55.06	54.47	65.65	74.38	47.25
Knowledgeable (KNW)	120.38	51.44	63.45	54.17	59.60	64.58		57.45	75.15	79.47	36.42
Compassionate (COM)	97.94	33.29	55.40	27.93	28.21	48.30	63.86		61.39	41.48	35.88
Religious Objections (REL)	105.76	65.92	86.85	68.56	69.62	71.07	82.31	71.17		86.89	94.11
Organ and Tissue Donation	90.33	71.64	99.52	37.78	21.91	65.20	71.64	31.35	84.47		73.00
Yourself (YOU)	84.50	34.87	58.28	28.31	33.72	46.33	35.64	31.78	85.78	61.54	

Note: *N* = 86; Means are displayed to the left of the diagonal; Standard deviations are displayed to the right of the diagonal.

religious objections and all other concepts were greater in the baseline sample than in either the treatment or control samples. Respondents also evaluated the distance between *yourself* and *OTD* as larger in the baseline sample (M = 79.04, SD = 81.21) than in either of the latter samples (treatment: M = 56.73, SD = 54.43; control: M= 61.54, SD = 73.00). Students' evaluations of the distances between *OTD* and *help others* and *compassionate* also decreased from baseline (M = 47.81, SD = 56.68 and M = 63.16, SD = 72.19, respectively) to treatment (M = 40.11, SD = 49.18 and M = 42.43, SD = 44.43, respectively) and control (M = 21.91, SD = 34.02 and M = 31.35, SD = 41.48, respectively) conditions.

Students' assessment of the differences (i.e., distances) between the concepts *yourself* and *organ and tissue donation* were expected to differ between the treatment and control conditions, as a result of exposure to the informational OTD message containing the concepts *compassionate*, *help others*, and *religious objections*. To test this prediction, an independent samples t-test was performed to determine whether mean distances changed as a function of condition. Although this was not significant, t (159) = -0.46, p = .65, students in the treatment group (M = 56.73, SD = 54.43) reported a smaller assessment of the difference between the concepts, as compared to students in the control group (M = 61.54, SD = 73.00)

In fact, a series of independent samples t-tests of the 55 mean differences between the pair-comparisons between the treatment and control groups revealed only six significant differences (Table 17). Students in the control group rated the difference between *unsure* and *family*, t (151.43) = -2.57, $p < .05$, η^2 = .04, and *unsure* and *religious objections*, t (156) = -1.97, $p < .05$, η^2 = .02, significantly larger than did

Table 17. Mean Differences (Treatment – Control)

Concept	*UNS*	*FAM*	*DWO*	*GD*	*HLP*	*MOR*	*KNW*	*COM*	*REL*	*OTD*
Family (FAM)	-35.62*									
Discussion with Others (DWO)	-13.08	9.05								
Good (GD)	-5.23	10.95	1.20							
Help Others (HLP)	-14.43	18.88*	3.66	10.53						
Moral Obligation (MOR)	-22.29	7.41	7.80	22.06*	23.43					
Knowledgeable (KNW)	-19.54	9.63	-8.87	1.02	6.68	1.66				
Compassionate (COM)	-14.95	9.48	14.95	11.73	18.95*	18.42	4.30			
Religious Objections (REL)	-24.99*	16.58	11.68	18.95	20.14	10.53	2.66	6.17		
Organ and Tissue Donation	-12.53	-11.78	-20.76	4.11	18.20*	-2.16	-10.84	11.08	14.5	
Yourself (YOU)	-13.15	0.95	4.79	16.99*	3.73	6.24	22.79*	7.14	5.67	-4.72

Note: Statistical significance noted as follows, * $p < .05$.

students in the treatment group. However, students in the treatment condition reported significantly larger differences between the concepts *help others* and *family*, t (158) = 2.20, $p < .05$, $\eta^2 = .03$, *good* and *moral obligation*, t (121.40) = 2.18, $p < .05$, $\eta^2 = .04$, *good* and *yourself*, t (129.46) = 2.42, $p < .05$, $\eta^2 = .04$, and *help others* and *compassionate*, t (159) = 2.62, $p < .01$, $\eta^2 = .04$, than did students in the control group.

Tables 18 and 19 present the rotated coordinates and eigenvalues for the treatment and control groups, respectively. The first two dimensions resulting from the analysis of the pair-comparison ratings from the treatment sample accounted for 52.8% of the variance in the data. The first dimension distinguished between *religious objections* and *good*; the second between *religious objections* and *unsure*. The third dimension, accounting for 18.6% of the variance differentiated between *discussion with others* and *compassionate*.

For the control group, the first two dimensions explain 66.6% of the variance in the data; the third 20.4%. Dimension one differentiated between *unsure* and *knowledgeable*, while dimension two differentiated between *unsure* and *religious objections*. The third dimension distinguished between *discussion with others* and *OTD*.

Figure 30 displays the map of students' perceptions of OTD for the treatment and control groups. The two spaces appear to be very similar, yet a number of concepts changed position from treatment to control. The term *unsure* moved 25.38 units and is located off the map for the control condition (Table 20). *Family* and *discussion with others* each moved 21.73 units and 19.01 units, respectively. *OTD* and *good* also assumed new positions. *OTD* moved 18.64 units and *good* 17.48 units. The remaining six terms or phrases (e.g., *yourself*, *knowledgeable*, *compassionate*, *religious*

objections, *moral obligations*, and *help others*) ranged in movement from 13.23 units to 16.03 units. Yet, the only real movement was seen in the concepts *family* and *yourself* (Table 21).

Thus, the data partially support the supposition that the informational OTD message would generate movement between the concepts *OTD* and *yourself*, such that the distance between the two would decrease. Students' ratings of similarity of the two concepts was smaller (i.e., more similar) in the treatment condition than in the control, and the perceptual maps of the treatment and control groups shows movement of the concepts toward one another, yet the mean difference between the treatment and control groups (-4.72) was not significant.

Table 18. Rotated Coordinates and Eigenvalues of OTD Space (Treatment)

	Coordinates										
Concept	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*
Unsure (UNS)	50.11	40.81	13.11	0.51	3.85	-6.39	2.17	-3.75	-0.31	-0.04	10.28
Family (FAM)	-8.49	-5.78	-13.64	16.09	-18.03	-11.23	0.34	-7.66	10.20	-0.02	-1.87
Discussion w/ Others (DWO)	-8.40	-0.25	50.25	-2.18	-9.25	3.11	-10.55	4.57	2.14	0.21	-8.40
Good (GD)	-23.71	-7.49	-5.42	-14.60	-5.42	-3.74	-12.49	-11.57	-8.09	-0.11	6.70
Help Others (HLP)	-15.30	12.47	-9.51	-5.73	2.89	27.62	1.95	-2.79	4.80	-0.06	5.70
Moral Obligation (MOR)	2.67	-6.33	-12.01	38.59	11.83	2.54	-10.99	6.38	-3.35	0.25	3.33
Knowledgeable (KNW)	-17.60	-30.87	21.75	0.66	17.89	-5.41	15.18	-0.77	0.61	-0.15	10.74
Compassionate (COM)	-7.20	1.38	-17.86	-18.86	-14.64	-6.21	0.22	15.51	0.39	0.37	9.65
Religious Objections (REL)	57.59	-36.27	-10.84	-12.12	-0.18	5.42	-0.54	-0.93	-0.46	-0.07	-8.94
Organ and Tissue Donation	-18.70	19.16	-13.95	-13.61	26.69	-8.52	-1.93	1.05	2.08	0.03	-15.26
Yourself (YOU)	-10.98	13.16	-1.89	11.27	-15.64	2.80	16.63	-0.04	-8.02	-0.41	-11.94
Eigenvalues (roots) of eigenvector matrix	7,606	4,761	4,255	2,814	2,095	1,137	908	519	278	-0.45	-932
Percentage of variance accounted for by factor	32.45	20.31	18.51	12.01	8.94	4.85	3.87	2.21	1.19	0.00	3.98
Sum of Roots	23,439.49										

Note: *N* = 76.

Table 19. Rotated Coordinates and Eigenvalues of OTD Space (Control)

	Coordinates										
Concept	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*
Unsure (UNS)	55.23	58.12	28.48	-7.29	6.83	-8.61	5.20	-5.19	-5.17	-0.02	5.16
Family (FAM)	-14.77	-22.91	-13.20	10.16	-19.91	4.32	0.57	-1.21	3.04	0.00	15.21
Discussion w/ Others (DWO)	0.24	-8.50	45.61	2.86	-22.01	6.40	-12.98	9.52	4.92	0.03	0.85
Good (GD)	-11.85	-2.93	-7.47	-6.17	-2.21	-10.96	-9.91	-7.24	-7.40	-0.02	-3.33
Help Others (HLP)	-9.80	6.77	-14.00	-1.97	4.98	14.13	-2.90	2.30	8.75	-0.03	-7.06
Moral Obligation (MOR)	-1.17	-6.77	-13.45	29.38	5.28	7.33	-16.17	2.93	-3.23	0.00	0.68
Knowledgeable (KNW)	-27.38	-25.57	18.30	5.56	14.37	-3.16	22.67	-5.34	-1.75	-0.03	3.52
Compassionate (COM)	-10.88	4.29	-10.34	-12.20	-10.27	-3.13	-6.27	13.48	4.23	-0.04	-3.59
Religious Objections (REL)	43.30	-38.26	-13.80	-13.08	4.99	6.46	1.64	-3.78	0.11	0.01	-5.19
Organ and Tissue Donation	-9.18	24.28	-28.38	-21.60	25.71	-5.01	2.67	0.44	-0.01	0.05	6.00
Yourself (YOU)	-13.74	11.49	8.43	14.36	-7.76	-7.77	14.49	-5.89	-3.09	0.04	-12.24
Eigenvalues (roots) of eigenvector matrix	9,769	5,556	4,682	2,250	1,576	772	505	131	0.01	-558	-1,669
Percentage of variance accounted for by factor	42.45	24.14	20.35	9.78	6.85	3.35	2.19	0.57	0.00	2.43	7.26
Sum of Roots	23,011.97										

Note: *N* = 86.

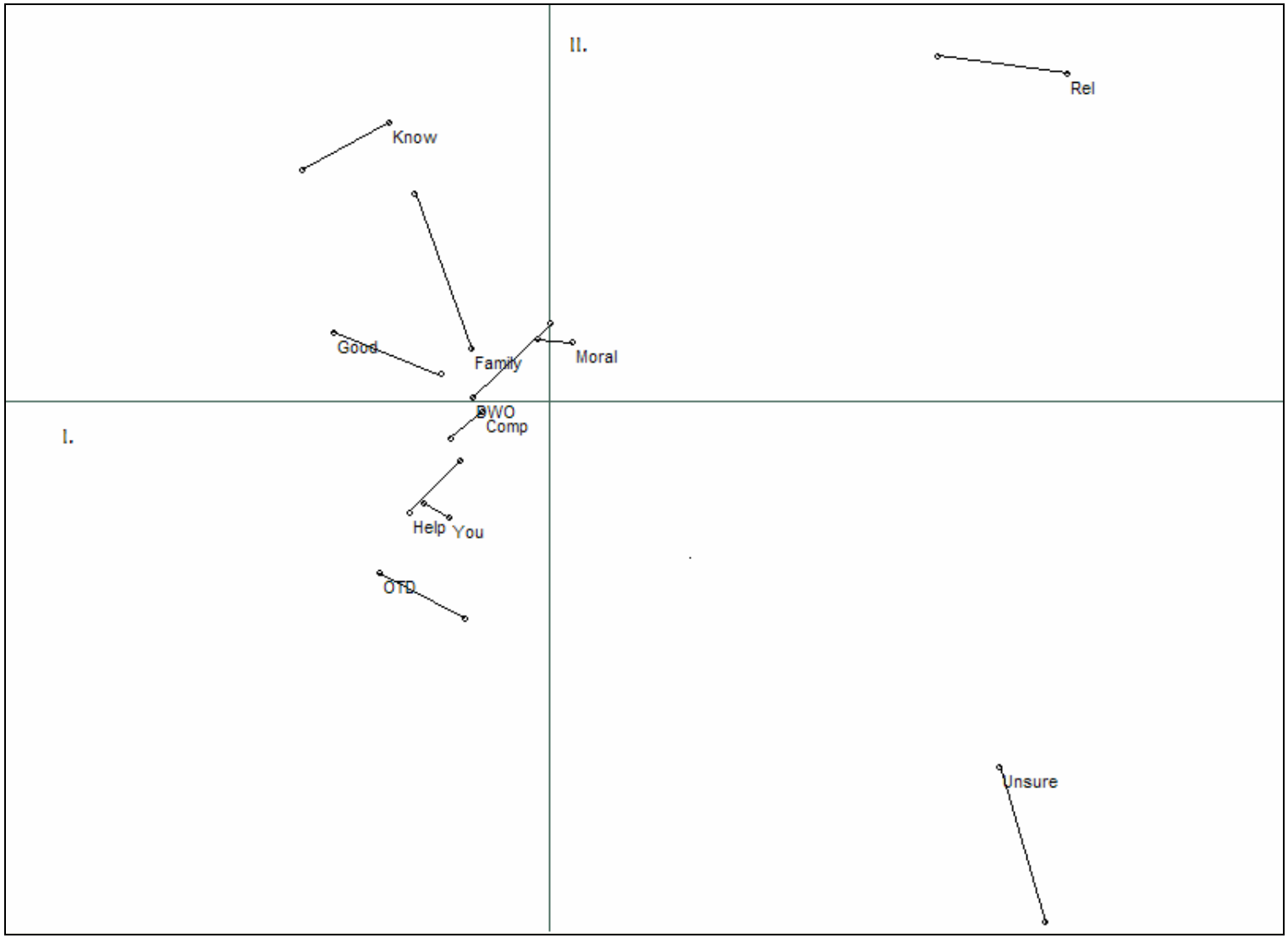
Table 20. Movement of Concepts between Treatment and Control Conditions

Concept	*Movement*
Unsure	25.37 units
Family	21.73 units
Discussion with Others	19.01 units
Good	17.48 units
Help Others	16.03 units
Moral Obligation	13.63 units
Knowledgeable	15.62 units
Compassionate	13.22 units
Religious Objections	14.85 units
Organ and Tissue Donation	18.64 units
Yourself	14.39 units
Mean Distance	17.27 units

Table 21. Correlations among Corresponding Dimensions (Treatment and Control)

Dimension	*Correlation*
1	.978429
2	.800691
3	.931122
4	.895412
5	.909038
6	.955489
7	.949920
8	.928835
9	.982160
10	.924718
11	.883529

Figure 30. Two-Dimensional Comparison of Treatment and Control Groups



Note: The point designated by the concept term represents the concept positions for the treatment sample; the point at the opposite end of the vector represents that of the control.

CHAPTER 4: DISCUSSION

Research on attitudes in the context of organ and tissue donation has suffered the same measurement problems endemic to the wider literature in social and behavioral research. The multitude of studies conducted on organ donation present redundant findings: first that attitudes are decidedly positive and these same positive attitudes are weak to moderate predictors of intentions to donate (measured as signing the organ and tissue registry). It was posited that the attitude-behavior gap noted in past OTD research was an artifact of the measurement system used in the assessment of individuals' attitudes toward donation. As such, one of the foci of this research was a comparison of Likert and multidimensional approaches to the measurement of attitudes toward donation. In addition, this research sought to identify the underlying structure of college students' attitudes toward organ donation, that is, the set of beliefs students hold regarding the topic of organ and tissue donation and the relationships among them. The current study also examined the structural effects incurred by exposure to new information on OTD. The results of this research advance our knowledge of attitudes in the context of organ donation by assessing students' OTD attitude structures and providing a glimpse into students' perceptions of OTD.

Overall Findings

Consistent with past OTD research, students held positive cognitions regarding the topic (Feeley & Servoss, 2005; Marshall & Feeley, in press). Students commonly equated OTD with the concepts *save lives*, *help others*, and *good*. Even students indicating their intentions not to become organ donors acknowledged the importance of organ donation in saving peoples' lives. For example, one student remarked, "it's good

for humanity, but maybe not for me right now." Students' positive perceptions of organ donation were exhibited in their pair-comparisons as well. Students registered as organ donors and students intending to become donors reported the shortest distances between *OTD* and *good*; nondonors and students with no intentions to donate their organs rated the two concepts as moderately close, and students uncertain of their future intention toward donation reported the largest distance between the two. The concept *good* also maintained close proximity to other concepts in students' perceptual spaces.

Students' reluctance to register as an organ donor stemmed largely from anxieties or fears regarding the donation and/or transplantation process. Many students cited fears regarding "the process itself" and of "medical problems [that] may arise from donating." Students repeatedly expressed these concerns in the open-ended responses to the concepts *anxiety* and *unsure*. This is further supported by the fact that many students admitted having limited knowledge of the OTD process including, not knowing "how the process works," "who is getting your organs," or "the specific procedures." Additional evidence of students' lack of knowledge was provided by the pair-comparison data and students' perceptual maps of OTD. Students in the three samples (i.e., baseline, treatment, and control) reported mid-range distances between the concepts *yourself* and *knowledgeable* and *knowledgeable* and *OTD*, and the term *knowledgeable* was often located on the periphery of students' maps. Moreover, students still unsure of their intentions regarding donorship reported the largest distances between these concepts. This suggests that donors and nondonors feel they have enough knowledge on the topic to make a decision regarding donation, whereas students unsure about

their future intentions are awaiting more information on the topic before coming to a donation decision.

Students surveyed were also largely unaware of the need to communicate one's donation wishes to family members and/or friends. The phrase *discussion with others* evoked the idea of gathering other peoples' opinion about donation, gaining additional information on the topic, and for some, creating awareness of the need for donors. Very few, however, noted having spoken with family or friends regarding the topic or the decision to become an organ donor. Nondonors and students who had not yet come to a decision regarding the donation of their organs provided the largest ratings of the distance between *discussion with others* and *OTD*. With the exception of the space for donors, *discussion with others* remained somewhat removed from the concepts *yourself* and *OTD*, but close to *family*. Although it seems students take part in family communication, the topic of organ donation is rarely discussed.

Another source of students' hesitance in becoming donors was religion. Responses to the phrase *religious objections* often made note of this: "some religions may be against tissue and organ donation," "some religions do not approve of it." Students also expressed the importance placed on the church's stance on the issue in their decision to donate: "might stop me from donating," "very important part in decision making." Obviously, students were largely unaware that most religions are in favor of the practice of organ donation. This finding was supported by past research in the area of religion and organ and tissue transplantation (Horton & Horton, 1991; Ryckman, van den Borne, Thornton, & Gold, 2005). In contrast to these results, both the pair-comparison data and its resulting multidimensional counterpart indicate otherwise.

Students commonly assigned large distances to the concept pair of *religious objections* and *OTD*; and, *religious objections* was found on the periphery of each space. It may be the case that students do not really have religious reasons for not choosing to become donors, yet they find religion a convenient excuse.

These findings indicated that students lack significant knowledge on many aspects of the donation and transplantation processes (*c.f.*, Feeley & Servoss, 2005; Horton & Horton, 1991; Kopfman & Smith, 1996). Students may be more inclined to become organ donors after becoming informed on the procedural aspects of organ donation and transplantation and engaging in conversations on the topic.

Likert versus mulitdimensional scaling. The Likert-scaled attitude measures differentiated between donors' and nondonors' attitudes toward OTD and between the attitudes of students intending to donate their organs in the future, students who did not report future intentions toward donation, and students who were unsure of their future intentions. The scale, with the help of students' age, also successfully predicted donor status, and allowed for the broad characterization of students attitudes (e.g., OTD is unnatural and frightening). The scale, however, did not successfully predict students' intentions toward donation, nor did it differentiate between the treatment and control groups; the mean attitude scores (i.e., Likert) were exactly the same in the treatment sample as in the control.

The lack of any difference between the treatment and control may be attributed to the relatively small and unequal sample sizes (e.g., treatment N = 76, control N = 86); this is also a potential reason why the Likert attitudes did not predict students' intent to become donors. Another potential explanation concerns the OTD message to which

students in the treatment group were exposed. The message may not have been vivid enough to have an impact on students' attitudes toward donation (Feeley, Marshall, & Reinhart, in press). In addition, there was no way to ensure students read the message before completing the survey questionnaire; many students may not have done so. Finally, as mentioned previously, organ donation literature has referenced the ceiling effect in accounting for lack of change noted in attitudes. This may also be the cause for the findings reported here.

The same assessment using the pair-comparison measure provided a much deeper understanding of students' attitudes toward donation and significant insight into this area of study. According to students' evaluations of the differences between the concept pairs, students characterized themselves as being good and compassionate people, and were also family-oriented. The mean distances indicated that students felt a moral obligation to their families, and to being good and helpful to others. In terms of OTD, mean distances between this concept and others in the set indicated students found it to be a helpful and compassionate act, though few had held conversations on the topic. As displayed in their pair-comparison judgements, students did not hold religious objections to the practice of OTD and had limited knowledge of the donation/transplantation process.

Consistent with the findings from the Likert measure, the pair-comparisons discriminated between donors and nondonors, and between students with different levels of intent toward donation. For instance, donors were characterized as having more discussions about donation and to perceive their families as being in support of OTD, as compared to nondonors. Donors also rated themselves as such by assigning a

small distance between the concepts *yourself* and *OTD*, as compared to the nearly significant, larger distance assigned to this concept pair by nondonors. However, the ratings also indicate that donors were more unsure about OTD than nondonors. That is, donors, as compared to nondonors, assigned smaller distances to the pairings of *unsure* to *OTD* and *yourself*. Though these differences were not significant, the pattern of findings is counterintuitive.

Nondonors considered themselves as more knowledgeable and helpful to others than did donors, as evidenced in their pair-comparison evaluations, and they were less likely to consider donation a moral obligation or duty. Nondonors also had more religious objections to donation than donors, overall, as evidenced by the small distances assigned to the pair-comparisons including the concept. The exception to this was for the pairing of *religious objections* to *yourself* and *OTD*. Again, this is counterintuitive. It would be expected that nondonors assign smaller distances than donors to these concept pairs. The inconsistencies found in donors' evaluations of *unsure* and *religious objections* may simply be a result of the small sample of donors completing the pair-comparison measure. However, they are rectified in the comparison of donors' and nondonors' spaces. The correlations between the dimensions on which *unsure* and *religious objections* lie for donors and nondonors are exceedingly. This indicates that any movement or change in position of the concepts *unsure* and *religious objections* from donors to nondonors remained along each concepts' dimension and no true change in position was incurred.

In regard to students' intentions to become donors in the future, students unsure of their future intentions generally reported the largest distances between the paired

concepts. This was further demonstrated by the perceptual map for students still undecided, wherein each concept was isolated from the others. In contrast, students with no inclinations toward donation reported the smallest distances between *religious objections* and the other ten concepts, suggesting religiosity may be a cause of these students' anti-donation position. Students intending to become organ donors generally reported the smallest distances for the paired concepts, including the pairing of *OTD* and *yourself*.

The multidimensional analysis of the mean distances between the concept pairs provides additional information that Likert scales cannot – students' OTD attitude structure as revealed in the perceptual maps. The positions of the eleven concepts in two-dimensional space revealed a fairly stable structure across the maps, in that most of the concepts clustered together near the origin, while *knowledgeable*, *religious objections*, and *unsure* maintained their positions on the outskirts of the maps. However, movement of the concepts, albeit small, was detected. In the maps of donors and nondonors, the difference was striking. Donors and intended donors seemed to place themselves in the center of the concepts, whereas nondonors placed themselves off to one side, as if they were keeping themselves at arm's length from the topic. True movement of the concept *yourself* in these spaces is supported by the correlations of the eleventh dimensions for donors and nondonors and for intended donors and students with no intentions to donate; in both cases the correlation decreased.

The avoidance-orientation observed in nondonors' and unintended donors' perceptual spaces may reflect students' desire to defend the self (Katz, 1960). The ego-defensive function of attitudes, as Katz (1960) describes, protects individuals' sense of

the self through avoidance and withdrawal. An individual's need for defense stems either from his or her "own unacceptable impulses" or from "the knowledge of threatening forces from without" (p. 172). In this instance, students (i.e., nondonors and unintended donors) may feel threatened by the thought of donation and the thought of their own mortality, and adopt an ego-defensive attitude toward the topic.

Finally, the MDS analysis uncovered latent variables (i.e., the dimensions) present in the mean differences. The analysis of the baseline measure revealed eleven dimensions, three of which accounted for a large portion of the variance in students' responses (e.g., *unsure* and *knowledgeable*, *religious objections* and *OTD*, and *discussion with others* and *OTD*). In fact, in each analysis performed the first three dimensions explained the most variance in the sample under investigation. Furthermore, the first three dimensions were commonly anchored by one or more of four concepts: *knowledgeable*, *religious objections*, *discussion with others*, and *unsure*. Other concepts emerged as well (e.g., *good*, *compassionate*, *family, OTD*), but not with the frequency of those noted above. Thus, students' level of knowledge on organ donation, their perceived religious objections to becoming donors, the amount of discussion about OTD students had engaged in, and their level of uncertainty best distinguished between donors, nondonors, and students' intentions toward donation.

Shepard (1972, p. 11), in his commentary on the limitations of multidimensional scaling as a analytic method, remarked,

> …the fact that certain types of methods are readily available, may lead an investigator to choose the kind of data he [or she] is going to collect solely on the basis that they be of the superficially correct format for one of those methods,

without ever giving careful consideration to the question of what sort of data are most likely to provide a real insight into whatever phenomenon is under study.

This warning can be applied to other methods as well, such as Likert scaling. The results of this research imbue new life into Shepard's (1972) concern. Care should be taken when choosing a technique for the measurement of attitudes in the context of organ donation for the MDS processes reported here supplied a wealth of information above and beyond that obtained by the more commonly adopted Likert scaling.

MDS and attitude change. Assessing attitude change via Likert-scaled measures was performed by comparing the attitude scores at two points in time. In this instance, it was done by comparing the attitude scores of one group of students who read an informational OTD message to another group who had not (i.e., a post only design).

The measurement of attitude change in multidimensional space consists simply of an assessment of the movement of concepts in the space. At first glance, it would appear that the informational OTD message influenced students' evaluations of the pair-comparison items. The location of all eleven concepts in the perceptual map of the treatment group changed location in the control map. Furthermore, respondents in the treatment condition seemed to have few religious objections to OTD, as evidenced in the large evaluations of the distance between the two concepts. In addition, respondents in the treatment condition associated OTD with compassion and helping others.

As compared to the control condition, in the treatment condition the phrase *religious objections* was rated as further away from nearly every other concept, with the exception of the concept *unsure*. Furthermore, *OTD* and *yourself* were closer in the

treatment condition than in the control, but OTD was closer to both *help others* and *compassionate* in the control condition as compared to the treatment. However, none of these differences were significant. Upon closer inspection, the results from the treatment and control measures are more similar than different.

One potential explanation for these results concerns the fact that the survey items on the pretest measure were not counterbalanced. That is, the paired comparisons, Likert, and demographic questions were presented to all students in the same order. Order effects and/or fatigue may have contributed to the observed distances between each concept (i.e., the structure of concepts). It is entirely possible that the mean distances observed in the baseline measure were an artifact of order, and there is actually no difference in mean distances based on donor status or intent to donate in the baseline measure.

A series of one-way analysis of variance (ANOVA) tests were performed, with survey order serving as the between subjects factor and each of the paired comparison items as the dependent measure, to test the veracity of this explanation. Only six tests were significant. All six compared the term *unsure* to another concept (e.g., *compassionate*, *knowledgeable*, *moral obligation*, *help others*, *good*, and *family*). The post hoc tests for all six showed a significant mean difference between the baseline (N = 165) measure and the treatment message condition (N = 18) in which the order of the paired comparisons was reversed (i.e., the order of the survey was the same, but for this one difference). Thus, it is impossible to know whether this difference was due to sample size, the OTD message (i.e., the manipulation), or the order of the pair-comparison items.

These findings may also be attributed to history. A public relations class in the Communication department began their annual OTD campaign in April of 2006; the same period of time in which students were completing the posttest and control measures. The campaign encouraged students to “Be a lifesaver. Be a donor.” Public relations students went class-to-class showing anecdotal videos of past donors, recipients, and those awaiting donations, and providing students with fliers containing statistical information on the topic. The fliers contained information regarding the number of individuals currently on the waiting list, the number of individuals dying while awaiting an organ, and the number of people who could potentially be saved through the donation of one’s organs and tissues.

Rather than the message contained in the treatment survey, this may be the cause for the reduction in distance between the concepts *OTD* and *yourself* observed between the baseline and treatment/control conditions. And, since (presumably) all students viewed the videos and/or received the fliers, this also provides a parsimonious explanation for why there was no significant difference between the control and treatment measures.

Implications

Possible alternative explanations aside, the current study has important implications for this domain of research. First, campaigns designed to increase donorship may benefit from the information gathered during the interviews and open-ended surveys. The results from phase two of this research indicate that students are well aware of the benefits of OTD (i.e., OTD saves lives and helps others), but are largely unknowledgeable about the OTD process. As a result, the procedural aspects of

donation and transplantation are the source of many students' fears and anxieties, and of their reluctance to become donors. Researchers have demonstrated the positive effects of knowledge on donation rates (Horton & Horton, 1990; Kopfman, 1994; Marshall & Feeley, in press; Radecki & Jaccard, 1999). However, highlighting the procedural aspects of donation may be the key to encouraging students' donation. Future OTD campaigns should incorporate procedural information in their messages such as the definition of brain death and requirements for placement on the waiting list.

In addition, this research makes suspect the use of Likert-scaled measures for OTD research. The examination of individuals' attitudes toward OTD may have been cut short had the Likert items had not been used in conjunction with the pair-comparison measures. There was no notable difference in students' Likert-scaled attitudes between the treatment or control groups. Upon close examination of the pair-comparison measures, however, changes in students' concept structures were observed. This implies that the 5-point Likert scales are too coarse to detect small changes in students' attitudes, or the structure of the beliefs underlying those attitudes. This also suggests that the ceiling effect reported by OTD researchers is, in fact, an artifact of the measurement system instead of a true representation of individuals' attitudes toward OTD.

In terms of its theoretical contributions, this research calls for the inclusion of the concept of uncertainty in the attitude-behavior link. Brashers (2001) contends that individuals may feel uncertain "when details of situations are ambiguous, complex, unpredictable, or probabilistic; when information is unavailable or inconsistent; and when people feel insecure in their own state of knowledge or the state of knowledge in

general" (p. 487). Participants in this research commonly experienced these symptoms of uncertainty. Many students had little or no knowledge of the donation/transplantation process, of their religion's stance on donation, or of the need for discussion of the topic. Other students' body of knowledge on the topic included myths and misperceptions regarding OTD. Moreover, the concept *unsure* emerged, by virtue of the MDS analysis of the pair-comparison data, as a central theme in this research.

Uncertainty has the effect of lessening one's sense of control and increasing stress (Brenders, 1987; Friedman, 1993; Stroebe & Stroebe, 1995). Thus, high levels of uncertainty may compel students to avoid donation even if they hold positive attitudes toward OTD (Stroebe & Stroebe, 1995). While this is hardly a new development in attitude theory, it is one which has been overlooked in research on attitudes in the context of organ donation.

The effect of uncertainty, or alternatively certainty, on the relationship between attitudes and behavior has been the focus of much research. Seibold (1975) proposed a model of the attitude-behavior relationship that incorporated certainty as a mediating variable. According to the model, increased levels of intention-, desirability-, and likelihood-certainty strengthens the attitude-behavior link. Seibold's tripartite conceptualization of certainty corresponds with Fishbein's (1967b) three attitudinal dimensions: conation, affect, and cognition, respectively. Johnson (1945) posited that certainty moderated judgment processes, which included the formation of attitudes. He theorized that strong attitude-behavior correspondence would be displayed by individuals having high levels of attitude certainty.

Research by Sample and Warland (1973) and Fazio and Zanna (1978a, 1978b) support these models. Sample and Warland (1973) hypothesized positive relationships between response certainty, attitudes, and behavior. They concluded that high levels of response certainty improved the predictive abilities of college students' political attitudes on their voting behaviors and behavioral intentions. Fazio and Zanna (1978a, 1978b) investigated the effects of various attitudinal qualities (e.g., direct experience and certainty) on the attitude-behavior link. Their research provided confirmation that such a relationship did indeed exist.

In the context of health communication, Brashers and colleagues (Brashers, Neidig, Cardillo, Dobbs, Russell, and Haas, 1999; Brashers, Neidig, Haas, Dobbs, Cardillo, & Russell, 2000) have studied uncertainty and uncertainty management in individuals diagnosed with HIV and AIDS. Babrow and Kline (2000) investigated the same issues in breast self-exams and Mishel (1988, 1990, 1999) has focused his efforts on uncertainty in chronic illnesses. Future research should extend this line of study into the domain of organ and tissue donation.

Limitations

A number of limitations to the present research should be noted. The first limitation concerns the use of independent samples. Participants completing the treatment and control measures were not the same as those completing the baseline survey. Though all subjects were from the same sampling pool (i.e., undergraduates), the student participants in these three groups may have been substantively different at the onset and, as such, this research cannot attribute any differences in observed attitudes or pair-comparisons between the baseline, treatment and control groups solely

to the manipulation (i.e., the OTD message). Stated differently, the results may simply have been an artifact of the sampling procedure.

That being said, the three conditions (i.e., baseline, treatment, control) were demographically similar. The average age of respondents was 20.3, 20.4, and 20.7 for the pretest, posttest, and control groups, respectively. Mean attitudes, as measured by the Likert-scaled questions, were positive and nearly identical for baseline (M = 3.99, SD = .62), treatment (M = 3.96, SD = .57), and control (M = 3.96, SD = .54). Men outnumbered women in all three conditions, though less so in the control, and all three groups of participants were disproportionately Caucasian. However, the treatment group did differ from the pretest and control in that it had a larger percentage of nondonors (91% as compared to 73.3% for pretest and 81.2% for control) and Asian participants (19.2% as compared to 5.5% for pretest and 7.7% for control).

The use of separate samples may also have contributed to the failure of the informational OTD message in moving the concepts *yourself* and *organ and tissue donation* closer together. The AMG (automatic message generator) generated a series of concepts to be used in a message to most effectively reduce the distance between the two aforementioned concepts for the *baseline* sample. The concept combinations the AMG generated were for the baseline sample as a whole, rather than for only nondonors in the sample. That there were few significant differences between the concepts between the treatment and control conditions may be explained by the fact that the two samples were substantively different. Therefore, the combination of concepts only applied to the baseline sample and decreasing the distance between *yourself* and *OTD* for the treatment and control groups necessitated an entirely different

combination. For example, a message incorporating procedural information may have worked better in moving the concepts *OTD* and *yourself* closer together for the treatment sample.

Another limitation concerns the set of concepts used in the pair-comparisons. In an effort to maintain a reasonable survey length, only eleven concepts were included in the pair-comparisons (i.e., 55 survey items). This set was not exhaustive. Phrases such as *body wholeness* and *save lives* were not included because it was thought that they were subsumed under *religious objections* and *help others*, respectively. In addition, the interviews generated a number of additional terms that were not used in this research including *education*, *awareness*, *thoughtless*, and *brain dead*. Past OTD research has also shown that personal experience with organ donation and transplantation has led to more positive attitude toward the issue (Cosse & Weisenberger, 2000; Feeley & Servoss, 2005); this may be another potential concept for use in future research.

In addition, the current study did not include terms representing values, abstract beliefs associated with one's decision to become an organ donor (e.g., human life, quality of life; Eagly & Chaiken, 1993). Research has shown that value beliefs also influence attitudes (Kristiansen & Zanna, 1988; Kerlinger, 1984). Ryckman et al. (2005) identified four values (e.g., benevolence, universalism, achievement, and stimulation) which significantly predicted donorship and which should be given consideration in future studies. The use of an exhaustive set of concepts would yield a better picture of individuals' conceptualizations of donation, transplantation, and procurement processes.

As stated previously, the baseline measure was not counterbalanced. This is another limitation to this research, as order effects or fatigue may have contributed to

the baseline findings. In addition, no demographic data was collected on the 32 interviews. Aside from the interviewee's gender, there is no way to know the age, major, or race of the students interviewed. Finally, no check was performed to determine whether students actually read the informational OTD message. A manipulation check consisting of factual questions concerning the message or a self-report of the amount of information gained by the message would have allowed for the assessment of students' gain in knowledge.

Directions for Future Research

In addition to the possibilities presented above, convenience samples of college students were used across all phases of this research. While the use of college students in OTD research has found support (e.g., Feeley & Servoss, 2005; Horton & Horton, 1991; Kopfman & Smith, 1996), college students are not representative of the populous as a whole. Hence, there is a need for new sampling procedures from which more generalizable data may be obtained. A stratified random sampling design in which equal proportions of college students, adults, Caucasians, minorities, donors and nondonors are included is one potential solution (Trochim, 2001). This strategy would mean oversampling minorities and donors through collaborations with local and national organ procurement organizations and the U.S. census.

Future research might further test the structural characteristics of individuals' beliefs and attitudes toward OTD. In this vein, an investigation of the effects of belief complexity on OTD attitudes may be warranted (Judd & Lusk, 1984; Linville, 1982; Linville & Jones, 1980). Other avenues for future research include the examination of increased awareness of OTD attitudes on individuals' attitude structure (Millar & Tesser,

1986; Wilson & Dunn, 1986) or the manipulation of the specific functions (e.g., the ego-defensive function) of attitudes toward OTD on individuals' attitude structures (Julka & Marsh, 2005).

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Appendix A

IRB Approved Proposals:

An Investigation of Students' Cognitions Regarding Organ Donation and

An Investigation of Attitude Measurement

UNIVERSITY AT BUFFALO
Children and Youth Institutional Review Board (CYIRB)
Health Sciences Institutional Review Board (HSIRB)
Social and Behavioral Sciences Institutional Review Board (SBSIRB)

PLEASE COMPLETE ALL QUESTIONS ON PAGES 1 AND 2.

1. **REQUEST FOR:** _____Full Review __X___Expedited Review _____ Exemption Request

2. **TYPE OF PROTOCOL:** __X___New _____ Continuing/Renewal _____Student Project _____ Class Project

3. **Principal Investigator: _Marshall_____Heather_____M.A.__ Faculty Sponsor: __Dr. Thomas H. Feeley_____**

   PI email address: ____hmm6@buffalo.edu_____ Faculty Sponsor email address: ___thfeeley@buffalo.edu_____

   Department Name: ____Communication_____ Hospital & Address: _____

   Administrative Contact Person (if applicable): _____

   Phone Number: __(716) 645-2141_____Ext.__1194_____ Fax Number: ___(716) 645-2086_____

4. **Title of Project**: ____An Investigation of Students' Cognitions Regarding Organ Donation _____

5. **Sites where research will be conducted**. Include under "other," all sites including those outside the USA.

   Check all that apply: _X__ UB ___ BGH ___ WCHOB ___ ECMC ___ MFH ___ RIA

   List all other sites: _____

6. **Source of Support:** ____ Externally Sponsored Research ____ Internally Supported Research _X___ Unfunded Research

   Sponsor and Sponsor Address: _____

7. **Check all subjects to be enrolled.** _____ Minors _____ Pregnant Women __X___ Students ____ Employee(s) of PI ____ Prisoners _____ Mentally Ill _____ Cognitively Impaired _____ None of the Above

8. **Repository of research files** (protocol, informed consents, amendments, etc). Provide location (campus or hospital), dept., room #, and bldg. where human subjects documentation will be retained for 3 years after completion of this study: _____329 Baldy Hall _____

9. **Signature of PI and Faculty Sponsor (if required)**: I affirm the accuracy of this application, and I accept the responsibility for the conduct of this research, the supervision of human subjects, and maintenance of informed consent documentation as required by the Health Sciences Institutional Review Board or the Social and Behavioral Sciences Institutional Review Board. This is to certify that the project identified above will be carried out as approved by the IRB, and will neither be modified nor carried out beyond the period approved without express review and approval by the IRB.

   _____ _____ _____ _____

   PI Signature Date Faculty Sponsor Signature Date

10. **Signature of Approval**:

IRB Chair/Authorized Reviewer Signature	Date of Approval	Date of Expiration

Additional Assurances
for Investigators and Key Study Personnel

1. **EDUCATIONAL REQUIREMENTS**: Federal regulations and UB Policy require assurance that all PI's, Co-PI's, and key study personnel (all personnel responsible for the design, conduct, data collection, or reporting of the research) complete an educational program in the protection of human research subjects. UB's educational program consists of:

1.a. Reading the *Belmont Report -Ethical Principles and Guidelines for the Protection of Human Research Subjects. http://ohrp.osophs.dhhs.gov/humansubjects/guidance/belmont.htm*

1.b. Reading the *Responsibilities of the Research Investigator* section of the UB Assurance of Compliance with Department of Health and Human Services Regulations for the Protection of Human Research Subjects. http://sp-webdv/humansubjects/investigator-menu.asp

1.c. Completion of an on-line tutorial. All University at Buffalo IRBs require completion of the NIH's *Human Participant Protections Education for Research Teams* tutorial at http://cme.cancer.gov/clinicaltrials/learning/humanparticipant-protections.asp. Certificates of completion must be submitted with applications.

By signing below I attest that I have completed all the required educational requirements:

PI, Co-Investigators and Key Personnel	Signature
Heather M. Marshall	
Dr. Thomas H. Feeley	

*** Certificates of Completion of an on-line tutorial must be attached for PI's, Co-PI's, and all Key Study Personnel***

2. **FINANCIAL DISCLOSURE REQUIREMENTS (FOR SPONSORED RESEARCH ONLY):** UB policy requires that all UB investigators and co-investigators **of sponsored research projects** (but not key study personnel) must complete an **Annual Disclosure of Significant Financial Interests and Significant Obligations** and file with their Dean's office. This form is found at http://www.research.buffalo.edu/forms/spa/financial_disclosure.doc or http://www.research.buffalo.edu/forms/spa/financial_disclosure.pdf

2.a. No Significant Financial Interest.

By signing below I attest that I have a current Financial Disclosure Statement on file with my Dean's Office and that neither I, my spouse, nor my dependents currently have a *Significant Financial Interest* in relation to this research proposal:

PI and Co-Investigators	Signature	School or College with Financial Disclosure Statement
Heather M. Marshall		
Dr. Thomas H. Feeley		

2.b. **Significant Financial Interest.** Please identify any investigators who do have a **Significant Financial Interest** (as defined in the UB Investigator Disclosure Policy found at www.research.buffalo.edu/policies/discl.asp.):

_____

NB: If an investigator does have a significant financial interest the IRB cannot approve the research protocol until the responsible Dean's Office notifies the IRB that the identified financial conflict-of-interest has been satisfactorily addressed.

UNIVERSITY AT BUFFALO
Children and Youth Institutional Review Board (CYIRB)
Health Sciences Institutional Review Board (HSIRB)
Social and Behavioral Sciences Institutional Review Board (SBSIRB)

EXPEDITED REVIEW FORM

Categories of Research That May Be Reviewed by the Institutional Review Board (IRB) through an Expedited Review Procedure[1]

Applicability

(A) Research activities that (1) present no more than minimal risk to human subjects, and (2) involve only procedures listed in one or more of the following categories, may be reviewed by the IRB through the expedited review procedure authorized by 45 CFR 46.1 10 and 21 CFR 56.1 10. The activities listed should not be deemed to be of minimal risk simply because they are included on this list. Inclusion on this list merely means that the activity is eligible for review through the expedited review procedure when the specific circumstances of the proposed research involve no more than minimal risk to human subjects.

(B) The categories in this list apply regardless of the age of subjects, except as noted.

(C) The expedited review procedure may not be used where identification of the subjects and/or their responses would reasonably place them at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, insurability, reputation, or be stigmatizing, unless reasonable and appropriate protections will be implemented so that risks related to invasion of privacy and breach of confidentiality are no greater than minimal.

(D) The expedited review procedure may not be used for classified research involving human subjects.

(E) The standard requirements for informed consent (or its waiver, alteration, or exception) apply regardless of the type of review - expedited or convened - utilized by the IRB.

(F) Categories one (1) through seven (7) pertain to both initial and continuing IRB review.

Research Categories

Expedited review is requested because human subject involvement is restricted to **(check all that apply):**

_____ **(1)** Clinical studies of drugs and medical devices only when condition (a) or (b) is met.
(a) Research on drugs for which an investigational new drug application (21 CFR Part 312) is not required. (Note: Research on marketed drugs that significantly increases the risks or decreases the acceptability of the risks associated with the use of the product is not eligible for expedited review). (b) Research on medical devices for which (i) an investigational device exemption application (21 CFR Part 812) is not required; or (ii) the medical device is cleared/approved for marketing and the medical device is being used in accordance with its cleared/approved labeling.

_____ **(2)** Collection of blood samples by finger stick, heel stick, ear stick, or venipuncture as follows:
(a) from healthy, non-pregnant adults who weigh at least 110 pounds. For these subjects, the amounts drawn may not exceed 550 ml in an 8 week period and collection may not occur more frequently than 2 times per week or (b) from other adults and children[2], considering the age, weight, and health of the subjects, the collection procedure, the amount of blood to be collected, and the frequency with which it will be collected. For these subjects, the amount drawn may not exceed the lesser of 50 ml or 3 ml per kg in an 8 week period and collection may not occur more frequently then 2 times per week.

_____ **(3)** Prospective collection of biological specimens for research purposes by noninvasive means. Examples: (a) hair and nail clippings in a non-disfiguring manner, (b) deciduous teeth at time of exfoliation or if routine patient care indicates a need for extraction (c) permanent teeth if routine patient care indicates a

need for extraction; (d) excreta and external secretions (including sweat); (e) uncannulated saliva collected either in an unstimulated fashion or stimulated by chewing gumbase or wax or by applying a dilute citric solution to the tongue; (f) placenta removed at delivery; (g) amniotic fluid obtained at the time of rupture of the membrane prior to or during labor, (h) supra- and subgingival dental plaque and calculus, provided the collection procedure is not more invasive than routine prophylactic scaling of the teeth and the process is accomplished in accordance with accepted prophylactic techniques; (i) mucosal and skin cells collected by buccal scraping or swab, skin swab, or mouth washings; (j) sputum collected after saline mist nebulization.

_____ **(4)** Collection of data through noninvasive procedures (not involving general anesthesia or sedation) routinely employed in clinical practice, excluding procedures involving x-rays or microwaves. Where medical devices are employed, they must be cleared/approved for marketing. (Studies intended to evaluate the safety and effectiveness of the medical device are not generally eligible for expedited review, including studies of cleared medical devices for new indications.) Examples: (a) physical sensors that are applied either to the surface of the body or at a distance and do not involve input of significant amounts of energy into the subject or an invasion of the subject's privacy, (b) weighing or testing sensory acuity; (c) magnetic resonance imaging; (d) electrocardiography, electroencephalography, thermography, detection of naturally occurring radioactivity, electroretinography, ultrasound, diagnostic infrared imaging, doppler blood flow, and echocardiography, (e) moderate exercise, muscular strength testing, body composition assessment, and flexibility testing where appropriate given the age, weight, and health of the individual.

_____ **(5)** Research involving materials (data documents, records, or specimens) that have been collected or will be collected solely for non-research purposes (such as medical treatment or diagnosis). (NOTE: Some research in this category may be exempt from the HHS regulations for the protection of human subjects. 45 CFR 46.1 01 (b)(4). This listing refers only to research that is not exempt)

_____ **(6)** Collection of data from voice, video, digital or image recordings made for research purposes.

__X___ **(7)** Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies. (NOTE: Some research in this category may be exempt from the HHS regulations for the protection of human subjects 45 CFR45.101(b)(2) and(b)(3). This listing refers only to research that is not exempt.)

_____ **(8)** Continuing review of research previously approved by the convened IRB as follows: (a) where (i) the research is permanently closed to the enrollment of new subjects, (ii) all subjects have completed all research-related interventions; and (iii) the research remains active only for long-term follow-up of subjects; or (b) where no subjects have been enrolled and no additional risks have been identified; or (c) where the remaining research activities are limited to data analysis.

_____ **(9)** Continuing review of research, not conducted under an investigational new drug application or investigational device exemption where categories two (2) through eight (8) do not apply but the IRB has determined and documented at a convened meeting that the research involves no greater than minimal risk and no additional risks have been identified.

_____ _____

Signature: Principal Investigator **Date**

[1] An expedited review procedure consists of a review of research involving human subjects by the IRB chairperson or by one or more experienced reviewers designated by the chairperson from among members of the IRB in accordance with the requirements set forth in 45 CFR 46.110.

[2] Children are defined in the HHS regulations as "persons who have not attained the legal age for consent to treatments or procedures involved in the research, under the applicable law of the jurisdiction in which the research will be conducted." 45 CFR 46.402(a).

CHECKLIST

When submitting your proposal for SBS-IRB review, please use the HS1A form as a cover sheet. This checklist should follow that form.

The purpose of this checklist is to facilitate the review process and to identify the ethical issues with which the Board is concerned. It is meant to be an aid for the researcher and for the Board. If you check "Yes" to any of the following questions, these are areas which require some justification and attention on your part in writing up your proposal for review.

____ CHECK HERE IF THIS IS A RENEWAL OR CONTINUATION OF A PREVIOUSLY APPROVED PROPOSAL.

Please check YES or NO to each of the following questions:

YES	NO	ITEM
	X	1. Will the populations studied be defined as consisting of any of the following vulnerable groups: Minors (under 18), pregnant women, prisoners, mentally retarded, mentally disabled? "Be defined as" means, for instance, they are recruited **because** they are pregnant, not "some subjects might be pregnant." If YES, **write in all that apply**.
	X	2. Will it be possible to associate specific information in your records with specific participants on the basis of name, position, or other identifying information contained in your records?
	X	3. Will persons participating or queried in this investigation be subjected to physical discomfort, pain, aversive stimuli, or the threat of any of these? (If YES, **write in all that apply**.)
	X	4. Will the investigation use procedures designed to induce participants to act contrary to their wishes?
	X	5. Does the investigation use procedures designed to induce embarrassment, humiliation, lowered self-esteem, guilt, conflict, anger, discouragement, or other emotional reactions? (If YES, **write in all that apply**.)
	X	6. Will participants be induced to disclose information of an intimate or otherwise sensitive nature?
	X	7. Will participants engage in strenuous or unaccustomed physical activity?
	X	8. Will participants be deceived (actively misled) in any manner?

	X	9. Will information be withheld from participants that they might reasonably expect to receive?
	X	10. Will participants be exposed to any physical or psychological risks not indicated in the protocol? (If YES, **explain**.)

Specify the maximum number of participants to be enrolled ____400_____

Project Title____An Investigation of Attitude Measurement_____

Signature – Researcher_____Date _____

Signature - Faculty Sponsor _____Date _____

An Investigation of Students' Cognitions Regarding Organ Donation

Principal Investigator: Heather M. Marshall
Faculty Sponsor: Dr. Thomas H. Feeley
Department of Communication
State University of New York at Buffalo
354 Baldy Hall, Amherst, NY 14260
Phone: 645-2141 x 1191; Email: hmm6@buffalo.edu

Description of Study Protocol

Purpose: To investigate students' thoughts and cognitions concerning organ and tissue donation (OTD). This research will allow for a deeper understanding of students' attitudes, beliefs, and misconceptions regarding the topics of organ donation and the transplantation process.

Subjects and Procedure:
Student participants will be recruited from an upper-level communication course (COM 380). Students will be offered extra credit for their voluntary participation in the research. As an alternative means of earning the same amount of extra course credit, the course instructor will offer the option to complete a written assignment. Students will be asked to sign-up for an interview session with the principal investigator, Miss Heather M. Marshall. Interviews are expected to take no longer than 10 minutes. Upon entering the research room, students will be asked to read and sign the informed consent form found in Appendix A. Students will be asked three open-ended questions regarding their thoughts, attitudes, and beliefs regarding OTD; they will then be asked to respond openly to a series of words associated with organ donation and the transplantation process (Appendix B).

Risks:

There are two possible risks to participation in this study. First, students may feel uncomfortable or self-conscious about being audiotaped while answering questions. If students express or display the least bit of discomfort, the interview will be stopped and the student will be asked whether they wish to have the audio-tape turned off and withdraw from the study. Students may also refuse to be audiotaped from the outset and ask Miss Marshall, the interviewer, to record their answers with pen or pencil. Students may also ask to review the tape and elect to edit or erase the interview partially or completely during or after the interview.

Students may also feel uncomfortable or squeamish about answering questions about organ donation. The questions deal with topics of a sensitive nature, events consequent to death, and therefore might be temporarily disturbing but it is highly unlikely. Students will be told before the survey completion the nature of the survey questions and there will be no deception in the study. Moreover, students may elect to not complete the interview and receive full credit for participating in the research. Students are expected to benefit by gleaning a sense of helping the public at large and contributing knowledge to current information regarding the nature of organ and tissue donation. Past research conducted by

Dr. Feeley studying organ and tissue donation with college students at SUNY Albany, SUNY Buffalo, Michigan State University, and SUNY Geneseo has never encountered an upset or disturbed student; to the contrary, college students typically find the topic interesting and often seek out additional information on the topic beyond the study.

The following protocol will be followed if a student is either visibly upset or communicates that s/he is upset. First, students will be reminded of the voluntary nature of the survey and will be encouraged to discontinue participation. Next, I will console the student and apologize for the situation. Finally if a student is still inconsolable, I will refer him or her to the University Student Counseling Center, 120 Richmond Quad, North Campus, 645-2720.

Treatment/Storage of Data: Following data collection, the audiotapes will be stored in Dr. Thomas H. Feeley's office (329 Baldy Hall). Transcription and destruction of the tapes will take place immediately following the completion of data collection. Any identifying information contained on the audiotapes will be removed during the process of transcription. The transcribed interview data will be stored on Heather Marshall's hard drive that is password protected and will only be accessible by Dr. Thomas H. Feeley (329 Baldy Hall) and Heather M. Marshall (204 Baldy Hall).

Confidentiality: Any identifying information that is obtained on the audiotape (e.g., students' first name or a friend or family member's name) is unintentional and will remain confidential. In addition, should any names be mentioned during the course of the interview, the audiotape will be edited to remove the names of those mentioned. Within two weeks of completing the interviews, the audiotapes will be transcribed, again removing any identifying information, and the tapes will be destroyed.

Informed Consent for Research Participation

Voluntary Informed Consent to Participate in Research

Project Title: **An investigation of students' cognitions regarding organ donation**

Principal Investigator: Heather M. Marshall, Department Communication

Faculty Sponsor: Dr. Thomas H. Feeley, Department of Communication

359 Baldy Hall, UB North Campus

Phone: 645-2141, x1194; Email: thfeeley@buffalo.edu

PURPOSE OF THE STUDY:

The purpose of the study is to investigate students' thoughts regarding organ and tissue donation (OTD). More specifically, the study seeks to understand students' attitudes, knowledge and cognitions (i.e., their thinking) about the topic of OTD. The information provided by you and your colleagues will help us more effectively plan informational campaigns on the topic of OTD.

RESEARCH PROCEDURES:

The current study requires approximately 10 minutes of your time and you will be asked to simply talk about your views regarding OTD. You will be asked three (3) questions on the topic of organ and tissue donation, and then asked to respond to a series of words associated with the topic of OTD. We would like to audiotape the conversation to better understand and best capture all your responses to the interviewer's questions. If you wish to participate in the research but do not feel comfortable being audiotaped, you may either answer each question by writing your answer in long hand or the interviewer may write in the answers herself during the non-audiotaped interview.

If you agree to participate in the study, you will be required to do the following:

1. ***Sign the consent form at the end of this document after you have carefully read the document and asked questions regarding your research participation.***
2. ***After signing the consent, indicate your consent or refusal to be audiotaped during the interview.***

DURATION OF RESEARCH PARTICIPATION:

We have allotted 15 minutes of time for your interview but do not expect the interview to last beyond 10 minutes of time. You, of course, are invited to speak freely and for as long a time as you wish after each question. If at any time before or during the interview with Miss Marshall you wish to withdraw participation you may do so without any penalty and are entitled to the course credit regardless of your level of participation in the interview.

RISKS:

There are two possible risks to participation in this study. First, you may feel uncomfortable or self-conscious about being audiotaped while answering questions. You may also feel uncomfortable or squeamish about answering questions about organ donation. In either instance, that is if you are feeling the least bit uncomfortable you may ask to have the audio-tape turned off and withdraw from the study. You may also refuse to be audiotaped from the outset and ask Miss Marshall, the interviewer, to record your answers with pen or pencil. You may also ask to review the tape and elect to edit or erase the interview partially or completely during or after the interview.

BENEFITS:

While there are no direct benefits to participating in the current research, you will earn course credit for your participation. Important to the principal investigator, Miss Marshall, is the possibility of learning what aspects of organ and tissue donation significantly affect students' attitudes and plans regarding donation.

CONFIDENTIALITY:

Any information that is obtained in this study that can identify you with your answers on the audiotape (e.g., your first name or a friend or family member's name) is unintentional and will remain confidential. The tapes will be kept in a private storage area for use in ongoing project evaluation and research. Only Miss Marshall and Dr. Thomas H. Feeley, Faculty Advisor, will have access to the tapes. Mrs. Amber Reinhart, your COM 380 instructor, will not listen to the audiotapes or know who participated in the study. No identifying information will be given to any researcher or will be presented in any educational or research forum. Any published transcripts of the tapes will use bogus names or initials to identify the speaker.

QUESTIONS?

For answers to pertinent questions about the research, contact Heather M. Marshall in the Communication Department, 204 Baldy Hall, hmm6@buffalo.edu, 645-2141, x1194. For questions about research participants' rights, contact the Social and Behavioral Sciences Institutional Review Board at 645-2711.

RIGHT OF REFUSAL:

Being a participant in this research is completely voluntary and your participation, or non-participation, will not affect other relationships and services you are entitled to as a UB student. You may refuse to participate in this study at any moment during the study and will be entitled to the course credit. You also reserve the right to withdraw your data (i.e., ask for the audiotape) during or after the study.

I, the undersigned, agree to participate in this study and have been given a copy of this consent form.

Student Signature ***Date***

Signature of Investigator Obtaining consent ***Date***

I give consent to audiotape the interview about the impact of the Advanced Public Relations class on my attitudes and plans regarding organ and tissue donation.

Please initial: _____ YES _____ NO

I give consent for tapes resulting from this study and interview to be used for research and educational purposes and understand my identification will be removed or masked and there is no other information that can link my identity with the tapes.

Please initial: _____ YES _____ NO

Thank you for your time and cooperation.

An Investigation of Students' Cognitions Regarding Organ Donation

1. Please tell me your thoughts, feelings, attitudes, and/or beliefs regarding organ and tissue donation (OTD). Talk as long as you would like.

2. Are you currently enrolled in a national or state Organ Donor Registry, or have you indicated your desire to be an organ donor online or while renewing your license?

    a. If yes – Please tell me the reason(s) why you have made the decision to become a donor.

    b. If no – Please tell me the reason(s) why you have not done so.

3. Please tell me what comes to mind when you think of the following words as they are used in reference to organ and tissue donation or the transplantation process:
    a. Save Lives…
    b. Help Others…
    c. Unsure…
    d. Compassionate…
    e. Anxiety…
    f. Religion…
    g. Knowledgeable…
    h. Discussion with others…
    i. Body wholeness…
    j. Good…

4. Are there any others you think should be added to this list?

UNIVERSITY AT BUFFALO
Children and Youth Institutional Review Board (CYIRB)
Health Sciences Institutional Review Board (HSIRB)
Social and Behavioral Sciences Institutional Review Board (SBSIRB)

PLEASE COMPLETE ALL QUESTIONS ON PAGES 1 AND 2.

11. **REQUEST FOR:** _____Full Review __X___Expedited Review _____ Exemption Request

12. **TYPE OF PROTOCOL:** __X___New _____ Continuing/Renewal _____Student Project _____ Class Project

13. **Principal Investigator: _Marshall_____Heather_____M.A.__ Faculty Sponsor: __Dr. Thomas H. Feeley____**

    PI email address: ____hmm6@buffalo.edu_____ Faculty Sponsor email address: ___thfeeley@buffalo.edu

    Department Name: ____Communication_____ Hospital & Address: _____

    Administrative Contact Person (if applicable): _____

    Phone Number: __(716) 645-2141_____Ext.__1194_____ Fax Number: ___(716) 645-2086_____

14. **Title of Project**: ____An Investigation of Attitude Measurement_____

15. **Sites where research will be conducted**. Include under "other," all sites including those outside the USA.

    Check all that apply: _X__ UB ___ BGH ___ WCHOB ___ ECMC ___ MFH ___ RIA

    List all other sites: _____

16. **Source of Support:** ____ Externally Sponsored Research ____ Internally Supported Research _X___ Unfunded Research

    Sponsor and Sponsor Address: _____

17. **Check all subjects to be enrolled.** _____ Minors _____ Pregnant Women __X___ Students _____ Employee(s) of PI _____ Prisoners _____ Mentally Ill _____ Cognitively Impaired _____ None of the Above

18. **Repository of research files** (protocol, informed consents, amendments, etc). Provide location (campus or hospital), dept., room #, and bldg. where human subjects documentation will be retained for 3 years after completion of this study: _____329 Baldy Hall _____

19. **Signature of PI and Faculty Sponsor (if required)**: I affirm the accuracy of this application, and I accept the responsibility for the conduct of this research, the supervision of human subjects, and maintenance of informed consent documentation as required by the Health Sciences Institutional Review Board or the Social and Behavioral Sciences Institutional Review Board. This is to certify that the project identified above will be carried out as approved by the IRB, and will neither be modified nor carried out beyond the period approved without express review and approval by the IRB.

_____ _____

PI Signature Date Faculty Sponsor Signature Date

20. **Signature of Approval**:

IRB Chair/Authorized Reviewer Signature	Date of Approval	Date of Expiration

Additional Assurances
for Investigators and Key Study Personnel

1. **EDUCATIONAL REQUIREMENTS**: Federal regulations and UB Policy require assurance that all PI's, Co-PI's, and key study personnel (all personnel responsible for the design, conduct, data collection, or reporting of the research) complete an educational program in the protection of human research subjects. UB's educational program consists of:

1.a. Reading the *Belmont Report -Ethical Principles and Guidelines for the Protection of Human Research Subjects. http://ohrp.osophs.dhhs.gov/humansubjects/guidance/belmont.htm*

1.b. Reading the *Responsibilities of the Research Investigator* section of the UB Assurance of Compliance with Department of Health and Human Services Regulations for the Protection of Human Research Subjects.http://sp-webdv/humansubjects/investigator-menu.asp

1.c. Completion of an on-line tutorial. All University at Buffalo IRBs require completion of the NIH's *Human Participant Protections Education for Research Teams* tutorial at http://cme.cancer.gov/clinicaltrials/learning/humanparticipant-protections.asp. Certificates of completion must be submitted with applications.

By signing below I attest that I have completed all the required educational requirements:

PI, Co-Investigators and Key Personnel	Signature
Heather M. Marshall	
Dr. Thomas H. Feeley	

*** Certificates of Completion of an on-line tutorial must be attached for PI's, Co-PI's, and all Key Study Personnel***

2. **FINANCIAL DISCLOSURE REQUIREMENTS (FOR SPONSORED RESEARCH ONLY):** UB policy requires that all UB investigators and co-investigators **of sponsored research projects** (but not key study personnel) must complete an **Annual Disclosure of Significant Financial Interests and Significant Obligations** and file with their Dean's office. This form is found at http://www.research.buffalo.edu/forms/spa/financial_disclosure.doc or http://www.research.buffalo.edu/forms/spa/financial_disclosure.pdf

2.a. No Significant Financial Interest.

By signing below I attest that I have a current Financial Disclosure Statement on file with my Dean's Office and that neither I, my spouse, nor my dependents currently have a *Significant Financial Interest* in relation to this research proposal:

PI and Co-Investigators	Signature	School or College with Financial Disclosure Statement
Heather M. Marshall		
Dr. Thomas H. Feeley		

2.b. **Significant Financial Interest.** Please identify any investigators who do have a **Significant Financial Interest** (as defined in the UB Investigator Disclosure Policy found at www.research.buffalo.edu/policies/discl.asp.):

_____

NB: If an investigator does have a significant financial interest the IRB cannot approve the research protocol until the responsible Dean's Office notifies the IRB that the identified financial conflict-of-interest has been satisfactorily addressed.

UNIVERSITY AT BUFFALO
Children and Youth Institutional Review Board (CYIRB)
Health Sciences Institutional Review Board (HSIRB)
Social and Behavioral Sciences Institutional Review Board (SBSIRB)

EXPEDITED REVIEW FORM

Categories of Research That May Be Reviewed by the Institutional Review Board (IRB) through an Expedited Review Procedure[1]

Applicability

(A) Research activities that (1) present no more than minimal risk to human subjects, and (2) involve only procedures listed in one or more of the following categories, may be reviewed by the IRB through the expedited review procedure authorized by 45 CFR 46.1 10 and 21 CFR 56.1 10. The activities listed should not be deemed to be of minimal risk simply because they are included on this list. Inclusion on this list merely means that the activity is eligible for review through the expedited review procedure when the specific circumstances of the proposed research involve no more than minimal risk to human subjects.

(B) The categories in this list apply regardless of the age of subjects, except as noted.

(C) The expedited review procedure may not be used where identification of the subjects and/or their responses would reasonably place them at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, insurability, reputation, or be stigmatizing, unless reasonable and appropriate protections will be implemented so that risks related to invasion of privacy and breach of confidentiality are no greater than minimal.

(D) The expedited review procedure may not be used for classified research involving human subjects.

(E) The standard requirements for informed consent (or its waiver, alteration, or exception) apply regardless of the type of review - expedited or convened - utilized by the IRB.

(F) Categories one (1) through seven (7) pertain to both initial and continuing IRB review.

Research Categories

Expedited review is requested because human subject involvement is restricted to **(check all that apply):**

_____ **(1)** Clinical studies of drugs and medical devices only when condition (a) or (b) is met.
(a) Research on drugs for which an investigational new drug application (21 CFR Part 312) is not required. (Note: Research on marketed drugs that significantly increases the risks or decreases the acceptability of the risks associated with the use of the product is not eligible for expedited review). (b) Research on medical devices for which (i) an investigational device exemption application (21 CFR Part 812) is not required; or (ii) the medical device is cleared/approved for marketing and the medical device is being used in accordance with its cleared/approved labeling.

_____ **(2)** Collection of blood samples by finger stick, heel stick, ear stick, or venipuncture as follows:
(a) from healthy, non-pregnant adults who weigh at least 110 pounds. For these subjects, the amounts drawn may not exceed 550 ml in an 8 week period and collection may not occur more frequently than 2 times per week or (b) from other adults and children[2], considering the age, weight, and health of the subjects, the collection procedure, the amount of blood to be collected, and the frequency with which it will be collected. For these subjects, the amount drawn may not exceed the lesser of 50 ml or 3 ml per kg in an 8 week period and collection may not occur more frequently then 2 times per week.

_____ **(3)** Prospective collection of biological specimens for research purposes by noninvasive means. Examples: (a) hair and nail clippings in a non-disfiguring manner, (b) deciduous teeth at time of exfoliation or if

routine patient care indicates a need for extraction (c) permanent teeth if routine patient care indicates a need for extraction; (d) excreta and external secretions (including sweat); (e) uncannulated saliva collected either in an unstimulated fashion or stimulated by chewing gumbase or wax or by applying a dilute citric solution to the tongue; (f) placenta removed at delivery; (g) amniotic fluid obtained at the time of rupture of the membrane prior to or during labor, (h) supra- and subgingival dental plaque and calculus, provided the collection procedure is not more invasive than routine prophylactic scaling of the teeth and the process is accomplished in accordance with accepted prophylactic techniques; (i) mucosal and skin cells collected by buccal scraping or swab, skin swab, or mouth washings; j.) sputum collected after saline mist nebulization.

_____ **(4)** Collection of data through noninvasive procedures (not involving general anesthesia or sedation) routinely employed in clinical practice, excluding procedures involving x-rays or microwaves. Where medical devices are employed, they must be cleared/approved for marketing. (Studies intended to evaluate the safety and effectiveness of the medical device are not generally eligible for expedited review, including studies of cleared medical devices for new indications.) Examples: (a) physical sensors that are applied either to the surface of the body or at a distance and do not involve input of significant amounts of energy into the subject or an invasion of the subject's privacy, (b) weighing or testing sensory acuity; (c) magnetic resonance imaging; (d) electrocardiography, electroencephalography, thermography, detection of naturally occurring radioactivity, electroretinography, ultrasound, diagnostic infrared imaging, doppler blood flow, and echocardiography, (e) moderate exercise, muscular strength testing, body composition assessment, and flexibility testing where appropriate given the age, weight, and health of the individual.

_____ **(5)** Research involving materials (data documents, records, or specimens) that have been collected or will be collected solely for non-research purposes (such as medical treatment or diagnosis). (NOTE: Some research in this category may be exempt from the HHS regulations for the protection of human subjects. 45 CFR 46.1 01 (b)(4). This listing refers only to research that is not exempt)

_____ **(6)** Collection of data from voice, video, digital or image recordings made for research purposes.

__X___ **(7)** Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.
(NOTE: Some research in this category may be exempt from the HHS regulations for the protection of human subjects 45 CFR45.101(b)(2) and(b)(3). This listing refers only to research that is not exempt.)

_____ **(8)** Continuing review of research previously approved by the convened IRB as follows:
(a) where (i) the research is permanently closed to the enrollment of new subjects, (ii) all subjects have completed all research-related interventions; and (iii) the research remains active only for long-term follow-up of subjects; or (b) where no subjects have been enrolled and no additional risks have been identified; or (c) where the remaining research activities are limited to data analysis.

_____ **(9)** Continuing review of research, not conducted under an investigational new drug application or investigational device exemption where categories two (2) through eight (8) do not apply but the IRB has determined and documented at a convened meeting that the research involves no greater than minimal risk and no additional risks have been identified.

_____ _____

Signature: Principal Investigator **Date**

[1] An expedited review procedure consists of a review of research involving human subjects by the IRB chairperson or by one or more experienced reviewers designated by the chairperson from among members of the IRB in accordance with the requirements set forth in 45 CFR 46.110.

[2] Children are defined in the HHS regulations as "persons who have not attained the legal age for consent to treatments or procedures involved in the research, under the applicable law of the jurisdiction in which the research will be conducted." 45 CFR 46.402(a).

CHECKLIST

When submitting your proposal for SBS-IRB review, please use the HS1A form as a cover sheet. This checklist should follow that form.

The purpose of this checklist is to facilitate the review process and to identify the ethical issues with which the Board is concerned. It is meant to be an aid for the researcher and for the Board. If you check "Yes" to any of the following questions, these are areas which require some justification and attention on your part in writing up your proposal for review.

____ CHECK HERE IF THIS IS A RENEWAL OR CONTINUATION OF A PREVIOUSLY APPROVED PROPOSAL.

Please check YES or NO to each of the following questions:

YES	NO	ITEM
	X	1. Will the populations studied be defined as consisting of any of the following vulnerable groups: Minors (under 18), pregnant women, prisoners, mentally retarded, mentally disabled? "Be defined as" means, for instance, they are recruited **because** they are pregnant, not "some subjects might be pregnant." If YES, **write in all that apply**.
	X	2. Will it be possible to associate specific information in your records with specific participants on the basis of name, position, or other identifying information contained in your records?
	X	3. Will persons participating or queried in this investigation be subjected to physical discomfort, pain, aversive stimuli, or the threat of any of these? (If YES, **write in all that apply**.)
	X	4. Will the investigation use procedures designed to induce participants to act contrary to their wishes?
	X	5. Does the investigation use procedures designed to induce embarrassment, humiliation, lowered self-esteem, guilt, conflict, anger, discouragement, or other emotional reactions? (If YES, **write in all that apply**.)
	X	6. Will participants be induced to disclose information of an intimate or otherwise sensitive nature?
	X	7. Will participants engage in strenuous or unaccustomed physical activity?
	X	8. Will participants be deceived (actively misled) in any manner?
	X	9. Will information be withheld from participants that they might reasonably expect to receive?

	X	10. Will participants be exposed to any physical or psychological risks not indicated in the protocol? (If YES, **explain**.)

Specify the maximum number of participants to be enrolled ____350_____

Project Title____An Investigation of Attitude Measurement_____

Signature – Researcher_____Date _____

Signature - Faculty Sponsor _____Date _____

Investigator Name: Heather M. Marshall

Protocol Title: An Investigation of Attitude Measurement

University at Buffalo
Social and Behavioral Sciences Institutional Review Board

Waiver of Consent Attachment (9/2001)

Informed consent of the subject is one of the fundamental principles of ethical research for human subjects. Informed consent is also mandated by Federal regulations (**45 CFR 46**) and **University policy for research with human subjects**. An investigator should seek a waiver of written or verbal informed consent only under compelling circumstances.

The IRB determines which type of consent applies to your research but please check the type that you recommend. The **Guidelines for Determining Type of Consent** will assist you in this process..

_X_ Waive Written Informed Consent (see Section A)

___ Waive Verbal and Written Informed Consent (see Section B)

SECTION A: Waive Written Informed Consent

I believe that this protocol is eligible for exemption of the written informed consent requirement because the protocol meets one of the following criteria:
(NOTE: Even when written informed consent is waived, the investigator is required to give subjects full informed consent verbally.)

____ (1) The only record linking the subject and the research would be the consent document and the principal risk would be potential harm resulting from breach of confidentiality. Each subject will be asked whether the subject wants documentation linking the subject with the research and the subject's wishes will govern.

Example: When there is a possible legal, social or economic risk to the subject entailed in signing the consent form, e.g., for immigrants who might be identified as being illegal aliens, or for HIV antibody-positive individuals who might be identified as such by signing the consent form;

_X__ (2) The research presents no more than minimal risk of harm to subjects and involves no procedures for which written consent is normally required outside of the research context.

Examples: 1) When, such as a mail survey, subjects are clearly informed about the research and receipt of their responses can be taken as an indication that they agree to participate; 2) When the identities of subjects will be completely anonymous if the consent form is not signed and 3) When obtaining signed consent is not appropriate or feasible according to the cultural standards of the population being studied.

SECTION B: Waive Verbal and Written Informed Consent

I believe that this protocol is eligible for exemption of written and verbal informed consent because the protocol meets **ALL** of the following criteria:

___ (1) The research presents no more than minimal risk of harm to subjects
___ (2) The waiver or alteration will not adversely affect the rights and welfare of the subjects
___ (3) The research could not practicably be carried out without the waiver or alteration.
___ (4) Whenever appropriate, the subjects will be provided with additional pertinent information after participation.

As the federal regulations note, "in cases where the documentation requirement is waived, the IRB may require the investigator to provide subjects with a written statement regarding the research." The Social and Behavioral Sciences Institutional Review Board often requires the use of such a written statement, in the form of **an information sheet**, which includes most or all of the same elements as a consent form, but does not require the signature of the subject. These elements would be as follows:

A) A statement that the study involves research, an explanation of the purposes of the research, the expected duration of the subject's participation, a description of the procedures, and identification of any procedures that are experimental.
B) A statement that participation in the research involves no known risks.
C) An explanation of whom to contact for answers to pertinent questions about the research (the PI and the PI's office telephone number; faculty sponsor, if applicable) and questions about human research subjects' rights (Social and Behavioral Sciences Institutional Review Board at 716.645.3321) and
D) A statement describing the extent, if any, to which confidentiality of records identifying the subject will be maintained.

An Investigation of Attitude Measurement

Principal Investigator: Heather M. Marshall
Faculty Sponsor: Dr. Thomas H. Feeley
Department of Communication
State University of New York at Buffalo
354 Baldy Hall, Amherst, NY 14260
Phone: 645-2141 x 1191; Email: hmm6@buffalo.edu

Description of Study Protocol

Purpose: To compare and contrast Likert attitude scales and attitude assessment using multidimensional scaling. This research protocol will also examine the structure of attitudes regarding organ and tissue donation (OTD) and to investigate the effects of new information on OTD attitude structure.

Subjects and Procedure: Student participants will be recruited from an introductory course in communication (COM 101) that has a research requirement as part of the course. Students will be offered 1.0 hours of credit for completing the survey and will be asked to complete the survey outside of class. Specifically, students will be asked to access the Internet to complete the survey instrument (http://www.surveymonkey.com/s.asp?u=826571591232). Students will read information regarding organ donation and complete measures assessing attitudes toward donation (Appendix A). Students will be invited to participate in the research via an inclass announcement, after which questions will be solicited and addressed. Completion time of participation in research is expected to take no longer than 30 minutes. Students will be asked to input their student and course numbers as a means of ensuring they receive course credit for their participation. This information will not be connected with their responses in any way.

Students in COM 101 (see syllabus in Appendix B) are required to complete 2 hours of research and students are given a number of different options to participate in research to meet the minimum requirement. The COM 101 course is taught by Mr. Brian Reynolds and the PI has no relationship to the COM 101 course other than a collegial relationship with the instructor. COM 101 students have 3 other options to completing the research requirement other than research that include attending presentations, library research and completion of a research paper. The 101 course instructor (and his graduate teaching assistants) tabulate each student's hours of research participation.

Risks: There are no known risks in participating in the study, however the questions deal with topics of a sensitive nature, events consequent to death, and therefore might be temporarily disturbing but it is highly unlikely. Students will be told before the survey completion the nature of the survey questions and there will be no deception in the study. Moreover, students may elect to not complete or read the survey and receive full credit for participating in the research. In addition to the benefits of gleaning a sense of helping the public at large and contributing

knowledge, students will also be given current information regarding the nature of organ and tissue donation. Past research conducted by Dr. Feeley studying organ and tissue donation with college students at SUNY Albany, SUNY Buffalo, Michigan State University, and SUNY Geneseo has never encountered an upset or disturbed student; to the contrary, college students typically find the topic interesting and often seek out additional information on the topic beyond the study. The following protocol will be followed if a student is either visibly upset or communicates that s/he is upset. First, students will be reminded of the voluntary nature of the survey and will be encouraged to discontinue participation. Next, I will console the student and apologize for the situation. Finally if a student is still inconsolable, I will refer him or her to the University Student Counseling Center, 120 Richmond Quad, North Campus, 645-2720.

Treatment/Storage of Data: All data will be stored on Heather Marshall's hard drive that is password protected and will only be accessible by Dr. Thomas H. Feeley (329 Baldy Hall) and Heather Marshall (204 Baldy Hall).

Confidentiality: Students will be asked to enter their student numbers and course registration numbers on the first page of the survey; this list will be used to ensure that all who complete the survey are credited for their time and effort. There will be no identifying information linking the participant and his or her data on the survey instrument.

A waiver of informed consent is requested, as the following required information is provided at the beginning of the online survey (Appendix A):

- Purpose of survey;
- Requirements of participation;
- Known risks of participation;
- Direct benefits of participation;
- Confidentiality of responses;
- Contact information for PI and IRB administration;
- Voluntary nature of participation.

An Investigation of Attitude Measurement

Principal Investigator: Heather M. Marshall
Faculty Sponsor: Dr. Thomas H. Feeley
Department of Communication
hmm6@buffalo.edu

Purpose of Research and Consent to Participate

The purpose of this research is to compare two methods of attitude assessment. This research will be used to inform future research in attitude measurement methodologies.

Your participation in completing this survey should not take longer than 30 minutes. You will receive 1 hour of research credit in exchange for participating in this survey. There are no known risks for participating in this research, but you should know the questions deal with events consequent to death and therefore may be temporarily disturbing. If you should feel upset for a prolonged period of time you should consider contacting the Student Counseling Center at 645-2720 on the North Campus. While there may be no direct benefit to you, we will learn more about these important topics. This survey is anonymous, which means that nobody, anywhere, will ever be able to link your identity with the data that you provide on this survey. For answers to pertinent questions about the research, contact Heather Marshall, Department of Communication, 716-645-2141 x 1086, University at Buffalo. For questions about research subjects' rights, contact the Social and Behavioral Sciences Institutional Review Board at 716-645-2711. Participation is voluntary and you will receive 1 hour of research credit even if you decide not to complete the survey.

Please know that your participation is greatly appreciated and your candid responses and the responses from your classmates in COM 101 have the potential of adding substantially to our knowledge in this important area of research.

To access the survey, please go to:
http://www.surveymonkey.com/s.asp?u=826571591232.

By completing this survey you are verbally consenting to participate in this research.

Please read the following information carefully before completing this survey:

Condition A: The process of becoming a donor has been made easier in the past decade. Most states, including New York, have established an electronic organ donation registry. This registry records and produces a database of all individuals who wish to become organ donors in the highly unlikely event one becomes eligible. The likeliness one would become eligible is very, very low as one must die of brain death (often from severe head trauma) and still have a beating heart. It is medically impossible to recover from brain death, despite what is presented in fictional books and movies.

Condition B: Kidney and organ failure are growing health concerns in the United States. The advances in surgical techniques and in immunology drugs have made organ transplantation a preferred method of treatment. Studies show that those fortunate enough to receive a donated organ live longer and enjoy higher quality of life compared to those who do not receive an organ. Currently, the number of individuals on the national waiting list is near 90,000 and this does not include the thousands upon thousands who, due to poor health or inadequate insurance, do not qualify for the national waiting list. Organs are transplanted based on need. Issues of race and ethnicity are only considered in regard to the antibody matching of donated organs to their potential recipients as the closer the match, the better the chances of recipients' recovery. Recipients' socioeconomic status is not a factor in the donation/transplantation process.

Condition C: The process of becoming a donor has been made easier in the past decade. Most states, including New York, have established an electronic organ donation registry. This registry records and produces a database of all individuals who wish to become organ donors in the highly unlikely event one becomes eligible. The likeliness one would become eligible is very, very low as one must die of brain death (often from severe head trauma) and still have a beating heart. It is medically impossible to recover from brain death, despite what is presented in fictional books and movies.

Kidney and organ failure are growing health concerns in the United States. The advances in surgical techniques and in immunology drugs have made organ transplantation a preferred method of treatment. Studies show that those fortunate enough to receive a donated organ live longer and enjoy higher quality of life compared to those who do not receive an organ. Currently, the number of individuals on the national waiting list is near 90,000 and this does not include the thousands upon thousands who, due to poor health or inadequate insurance, do not qualify for the national waiting list. Organs are transplanted based on need. Issues of race and ethnicity are only considered in regard to the antibody matching of donated organs to their potential recipients as the closer the match, the better the chances of recipients' recovery. Recipients' socioeconomic status is not a factor in the donation/transplantation process.

Condition D: No message.

Instructions: The following questionnaire asks you to give your opinion on a set of ideas. Please give your opinions by indicating how different pairs of concepts are. Distance between concepts is measured in units, so that the more different two concepts are, the more units apart they are.

To give you a "yardstick" to enable you to express how far apart two concepts are, we will say that Religious is 100 units different from Knowledgeable, or the concepts Religious and Knowedgeable are 100 units apart. In other words, all the differences between Religious and Knowledgeable together account for 100 units of difference.

The idea is for you to tell us your opinion of how many units apart the concept which follow are from each other. Remember, the more different two concepts are from each other, the larger the number of units apart they are. If you think any pair of concepts are more different than Religious and Knowledgeable, you would write a number larger than 100. If you think they are twice as large, write 200 If you think they are less different than Religious and Knowledgeable, you would write a number smaller than 100. For example, if you perceived them as one-half as large, write 50. If you think the two concepts are identical, that is, they are the same thing, you would write a "0". You can write any number you want.

Me and Organ and Tissue Donation _____
Me and Unsure _____
Me and Family _____
Me and Discussion with Others _____
Me and Good _____
Me and Help Others _____
Me and Moral Obligation _____
Me and Public Awareness _____
Me and Knowledgeable _____
Me and Compassionate _____
Me and Religious Objections _____
Organ and Tissue Donation and Unsure _____
Organ and Tissue Donation and Family _____
Organ and Tissue Donation and Discussion with Others _____
Organ and Tissue Donation and Good _____
Organ and Tissue Donation and Help Others _____
Organ and Tissue Donation and Moral Obligation _____
Organ and Tissue Donation and Public Awareness _____
Organ and Tissue Donation and Knowledgeable _____
Organ and Tissue Donation and Compassionate _____
Organ and Tissue Donation and Religious Objections _____
Unsure and Family _____
Unsure and Discussion with Others _____
Unsure and Good _____
Unsure and Help Others _____
Unsure and Moral Obligation _____

Unsure and Public Awareness _____
Unsure and Knowledgeable _____
Unsure and Compassionate _____
Unsure and Religious Objections _____
Family and Discussion with Others _____
Family and Good _____
Family and Help Others _____
Family and Moral Obligation _____
Family and Public Awareness _____
Family and Knowledgeable _____
Family and Compassionate _____
Family and Religious Objections _____
Discussion with Others and Good _____
Discussion with Others and Help Others _____
Discussion with Others and Moral Obligation _____
Discussion with Others and Public Awareness _____
Discussion with Others and Knowledgeable _____
Discussion with Others and Compassionate _____
Discussion with Others and Religious Objections _____
Good and Help Others _____
Good and Moral Obligation _____
Good and Public Awareness _____
Good and Knowledgeable _____
Good and Compassionate _____
Good and Religious Objections _____
Help Others and Moral Obligation _____
Help Others and Public Awareness _____
Help Others and Knowledgeable _____
Help Others and Compassionate _____
Help Others and Religious Objections _____
Moral Obligation and Public Awareness _____
Moral Obligation and Knowledgeable _____
Moral Obligation and Compassionate _____
Moral Obligation and Religious Objections _____
Public Awareness and Knowledgeable _____
Public Awareness and Compassionate _____
Public Awareness and Religious Objections _____
Knowledgeable and Compassionate _____
Knowledgeable and Religious Objections _____
Compassionate and Religious Objections _____

Instructions: Please indicate your level of agreement with the following statements using the following scale:

1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree

1. Organ donation allows something positive to come out of a persons' death.
2. I view organ and tissue donation as a negative procedure.
3. I support the idea of organ and tissue donation for transplantation purposes.
4. I believe that organ and tissue donation is an act of compassion.
5. I believe that organ and tissue donation is an unselfish act.
6. I view organ and tissue donation as a natural way to prolong life.
7. I view organ and tissue donation as a benefit to humanity.
8. Generally speaking, my attitude toward organ and tissue donation is positive.
9. I consider organ and tissue donation a frightening activity.
10. I think that organ and tissue donation is a safe, effective practice.

Instructions: Please answer the following series of questions by checking the box that corresponds to your response:

1. Have you signed an organ donor card or enrolled in the NYS Organ and Tissue Donor Registry as an indication of your intent to be an organ donor? *Yes/No*
2. If you have not, do you intend to do so? *Yes/No/Unsure*
3. Please indicate your major (intended) field of study: _____
4. Please indicate your age: _____
5. Please indicate your gender: ____ Male____ Female
6. Please indicate your ethnicity: ____ Caucasian

   ____ African American
   ____ Hispanic/ Latino

____ Asian
____ Other

If other, please indicate: _____

Appendix B

Catpac Exclude File

USE
MAKE
WHO
WHAT
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HOW
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THEIRS
THEIR
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HAD
WITH
ALSO
FROM
WERE
WHILE
THEN
NOW
HERE
THERE
CAME
INTO
DURING
THEY'D
AFTER
MRS
MISS
MISTER
THEY
MAY
SHALL
DID
DIDN'T
ISN'T
SHE
HER
HIM
YET
GET
KEPT
GIVE
THUS
VERILY
GOES
GONE
ECT
GOT
MID
OWN
VERY
EVERY
EACH
SOME
MUCH
ONLY
GAVE
BEING
WHICH
HIS
HERS
BEEN
USING
HER'S
WENT
MADE
UNTIL
SAID
SAY
TRIED
TRY
EITHER
OTHER
MORE
LESS
ALL
ONTO
DONE
SAW
DOES
NOT
BOTH
NIETHER
NOR
ALTHOUGH
THOUGH
WOULD
COULD
SHOULD
ABOUT
BECAUSE
BECAME
OFF
EXCLUDE
A
AN
ANOTHER
AS
AT
BACK
BE
BEFORE
BESIDES
BETWEEN
BY
COME
DO
EVEN
HE
HI
HIMSELF
IF
IN
IS
IT
JUST
LIKE
MANY
MOST
MUST
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OR
OUT
S
SAME
SEE
SINCE
SO
STILL
SUCH
TAKE
THAN
THOSE
THROUGH
TO
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UP
WAY
WE
WELL
YOU

Appendix C

Case Delimited Catpac Analyses

Figure 1A. Most Frequently used Words in Nondonors' Responses

DESCENDING FREQUENCY LIST					ALPHABETICALLY SORTED LIST				
WORD	FREQ	PCNT	CASE FREQ	CASE PCNT	WORD	FREQ	PCNT	CASE FREQ	CASE PCNT
I	183	21.6	126	32.4	AFRAID	9	1.1	8	2.1
THOUGHT	63	7.4	63	16.2	AM	24	2.8	23	5.9
DON'T	56	6.6	55	14.1	AROUND	13	1.5	13	3.3
HAVEN'T	56	6.6	54	13.9	CHANCE	12	1.4	12	3.1
NEVER	42	4.9	42	10.8	DIE	10	1.2	10	2.6
KNOW	38	4.5	38	9.8	DON'T	56	6.6	55	14.1
WANT	37	4.4	36	9.3	DONATE	18	2.1	18	4.6
THINK	29	3.4	28	7.2	DONOR	16	1.9	16	4.1
SURE	28	3.3	28	7.2	ENOUGH	10	1.2	9	2.3
LICENSE	26	3.1	26	6.7	FAMILY	18	2.1	17	4.4
AM	24	2.8	23	5.9	GOTTEN	10	1.2	10	2.6
I'M	20	2.4	18	4.6	HAVEN'T	56	6.6	54	13.9
ME	20	2.4	20	5.1	I	183	21.6	126	32.4
WILL	19	2.2	19	4.9	I'M	20	2.4	18	4.6
DONATE	18	2.1	18	4.6	KNOW	38	4.5	38	9.8
FAMILY	18	2.1	17	4.4	LICENSE	26	3.1	26	6.7
REALLY	17	2.0	16	4.1	ME	20	2.4	20	5.1
DONOR	16	1.9	16	4.1	NEVER	42	4.9	42	10.8
ORGAN	16	1.9	15	3.9	ORGAN	16	1.9	15	3.9
TIME	15	1.8	15	3.9	ORGANS	11	1.3	11	2.8
AROUND	13	1.5	13	3.3	PLAN	12	1.4	12	3.1
CHANCE	12	1.4	12	3.1	READY	10	1.2	10	2.6
PLAN	12	1.4	12	3.1	REALLY	17	2.0	16	4.1
ORGANS	11	1.3	11	2.8	REASON	11	1.3	11	2.8
REASON	11	1.3	11	2.8	SURE	28	3.3	28	7.2
DIE	10	1.2	10	2.6	THINK	29	3.4	28	7.2
ENOUGH	10	1.2	9	2.3	THOUGHT	63	7.4	63	16.2
GOTTEN	10	1.2	10	2.6	TIME	15	1.8	15	3.9
READY	10	1.2	10	2.6	WANT	37	4.4	36	9.3
AFRAID	9	1.1	8	2.1	WILL	19	2.2	19	4.9

Figure 2A. Nondonors' Dendogram

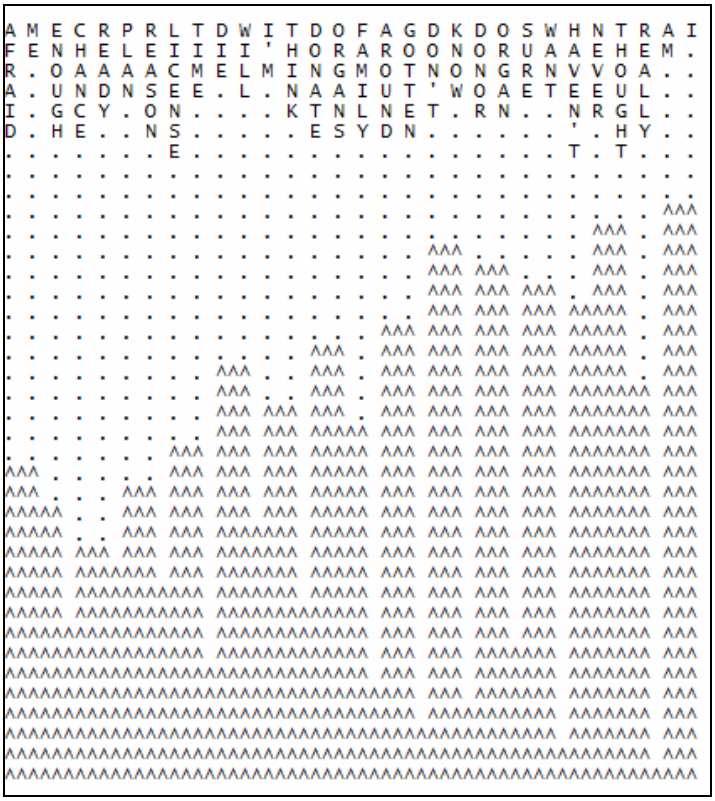


Figure 3A. Most Frequently used Words in Donors' Responses

DESCENDING FREQUENCY LIST

WORD	FREQ	PCNT	CASE FREQ	CASE PCNT
I	241	20.4	179	35.9
HELP	116	9.8	115	23.1
GOOD	69	5.8	68	13.7
NEED	69	5.8	67	13.5
SAVE	61	5.2	61	12.2
ORGANS	56	4.7	56	11.2
AM	51	4.3	48	9.6
PEOPLE	50	4.2	50	10.0
LIFE	43	3.6	42	8.4
LIVES	43	3.6	42	8.4
WANT	43	3.6	43	8.6
OTHERS	39	3.3	39	7.8
CAUSE	36	3.0	36	7.2
DEAD	32	2.7	32	6.4
THING	32	2.7	32	6.4
SOMEONE	30	2.5	30	6.0
WILL	21	1.8	21	4.2
ME	20	1.7	20	4.0
DIE	16	1.4	16	3.2
RIGHT	15	1.3	15	3.0
WANTED	15	1.3	15	3.0
ALWAYS	13	1.1	13	2.6
DEATH	13	1.1	12	2.4
SOMETHING	10	0.8	9	1.8
ELSE	9	0.8	9	1.8
KNOW	9	0.8	9	1.8
ANYMORE	8	0.7	8	1.6
ORGAN	8	0.7	8	1.6
THINK	8	0.7	8	1.6
IDEA	7	0.6	7	1.4

ALPHABETICALLY SORTED LIST

WORD	FREQ	PCNT	CASE FREQ	CASE PCNT
ALWAYS	13	1.1	13	2.6
AM	51	4.3	48	9.6
ANYMORE	8	0.7	8	1.6
CAUSE	36	3.0	36	7.2
DEAD	32	2.7	32	6.4
DEATH	13	1.1	12	2.4
DIE	16	1.4	16	3.2
ELSE	9	0.8	9	1.8
GOOD	69	5.8	68	13.7
HELP	116	9.8	115	23.1
I	241	20.4	179	35.9
IDEA	7	0.6	7	1.4
KNOW	9	0.8	9	1.8
LIFE	43	3.6	42	8.4
LIVES	43	3.6	42	8.4
ME	20	1.7	20	4.0
NEED	69	5.8	67	13.5
ORGAN	8	0.7	8	1.6
ORGANS	56	4.7	56	11.2
OTHERS	39	3.3	39	7.8
PEOPLE	50	4.2	50	10.0
RIGHT	15	1.3	15	3.0
SAVE	61	5.2	61	12.2
SOMEONE	30	2.5	30	6.0
SOMETHING	10	0.8	9	1.8
THING	32	2.7	32	6.4
THINK	8	0.7	8	1.6
WANT	43	3.6	43	8.6
WANTED	15	1.3	15	3.0
WILL	21	1.8	21	4.2

Figure 4A. Donors' Dendogram

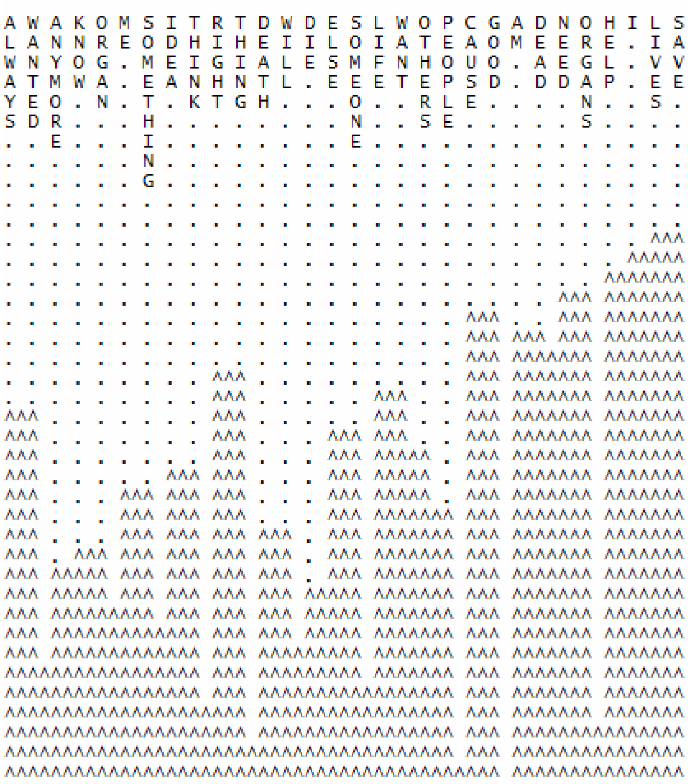


Figure 5A. Most Frequently used Words for *Save Lives*

DESCENDING FREQUENCY LIST					ALPHABETICALLY SORTED LIST				
WORD	FREQ	PCNT	CASE FREQ	CASE PCNT	WORD	FREQ	PCNT	CASE FREQ	CASE PCNT
I	53	13.7	22	21.8	ABLE	4	1.0	4	4.0
SAVE	41	10.6	36	35.6	AM	8	2.1	7	6.9
LIVES	37	9.6	33	32.7	BELIEVE	4	1.0	4	4.0
LIFE	20	5.2	16	15.8	DEATH	5	1.3	5	5.0
PEOPLE	19	4.9	18	17.8	DONATE	5	1.3	4	4.0
ORGAN	18	4.7	16	15.8	DONATING	8	2.1	8	7.9
ORGANS	18	4.7	17	16.8	DONATION	12	3.1	11	10.9
THINK	17	4.4	13	12.9	GO	5	1.3	4	4.0
GOOD	13	3.4	12	11.9	GOOD	13	3.4	12	11.9
TISSUE	13	3.4	11	10.9	GREAT	8	2.1	8	7.9
DONATION	12	3.1	11	10.9	HELP	9	2.3	8	7.9
SOMEONE	11	2.8	10	9.9	I	53	13.7	22	21.8
HELP	9	2.3	8	7.9	KNOW	6	1.6	4	4.0
NEED	9	2.3	9	8.9	LIFE	20	5.2	16	15.8
PERSON	9	2.3	7	6.9	LIVE	5	1.3	3	3.0
AM	8	2.1	7	6.9	LIVES	37	9.6	33	32.7
DONATING	8	2.1	8	7.9	NEED	9	2.3	9	8.9
GREAT	8	2.1	8	7.9	ORGAN	18	4.7	16	15.8
THING	8	2.1	7	6.9	ORGANS	18	4.7	17	16.8
KNOW	6	1.6	4	4.0	PEOPLE	19	4.9	18	17.8
SAVED	6	1.6	5	5.0	PERSON	9	2.3	7	6.9
WILL	6	1.6	5	5.0	SAVE	41	10.6	36	35.6
DEATH	5	1.3	5	5.0	SAVED	6	1.6	5	5.0
DONATE	5	1.3	4	4.0	SOMEONE	11	2.8	10	9.9
GO	5	1.3	4	4.0	THING	8	2.1	7	6.9
LIVE	5	1.3	3	3.0	THINK	17	4.4	13	12.9
TRANSPLANT	5	1.3	4	4.0	TISSUE	13	3.4	11	10.9
YES	5	1.3	5	5.0	TRANSPLANT	5	1.3	4	4.0
ABLE	4	1.0	4	4.0	WILL	6	1.6	5	5.0
BELIEVE	4	1.0	4	4.0	YES	5	1.3	5	5.0

Figure 6A. Save Lives Dendogram

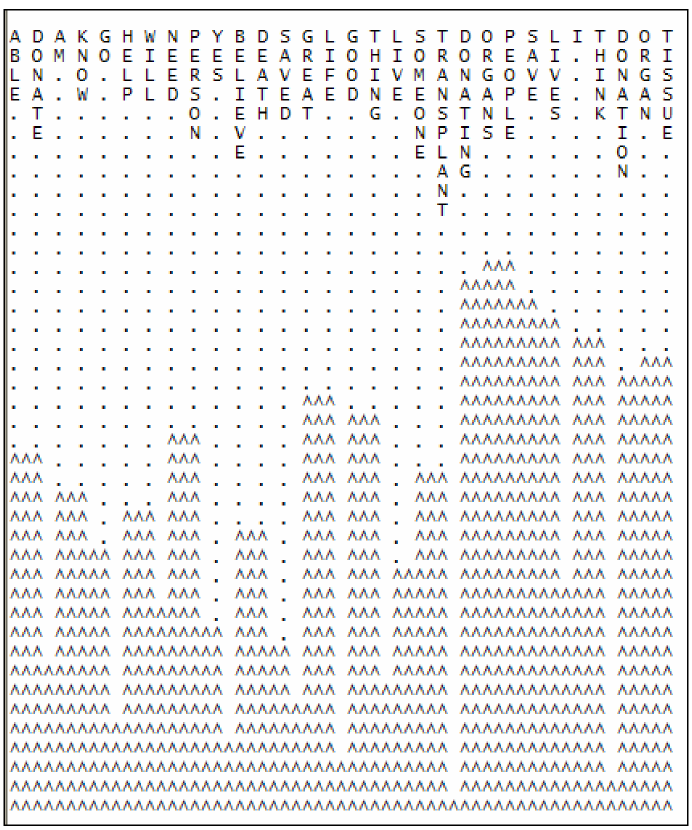


Figure 7A. Most Frequently used Words for *Help Others*

DESCENDING FREQUENCY LIST

WORD	FREQ	PCNT	CASE FREQ	CASE PCNT
I	47	11.6	25	25.0
OTHERS	38	9.4	36	36.0
HELP	36	8.9	31	31.0
PEOPLE	21	5.2	19	19.0
ORGAN	19	4.7	15	15.0
THINK	19	4.7	11	11.0
HELPING	18	4.5	14	14.0
NEED	15	3.7	13	13.0
LIFE	14	3.5	12	12.0
ORGANS	14	3.5	14	14.0
DONATING	13	3.2	13	13.0
LIVES	13	3.2	12	12.0
DONATION	12	3.0	11	11.0
GOOD	12	3.0	12	12.0
HELPS	10	2.5	9	9.0
SAVE	10	2.5	10	10.0
SOMEONE	10	2.5	10	10.0
TISSUE	10	2.5	9	9.0
SAVING	9	2.2	9	9.0
ELSE	8	2.0	8	8.0
THING	8	2.0	7	7.0
FAMILIES	7	1.7	6	6.0
WILL	7	1.7	7	7.0
AGAIN	6	1.5	6	6.0
PERSON	6	1.5	5	5.0
FAMILY	5	1.2	4	4.0
GREAT	5	1.2	5	5.0
ABLE	4	1.0	4	4.0
ALWAYS	4	1.0	4	4.0
BETTER	4	1.0	4	4.0

ALPHABETICALLY SORTED LIST

WORD	FREQ	PCNT	CASE FREQ	CASE PCNT
ABLE	4	1.0	4	4.0
AGAIN	6	1.5	6	6.0
ALWAYS	4	1.0	4	4.0
BETTER	4	1.0	4	4.0
DONATING	13	3.2	13	13.0
DONATION	12	3.0	11	11.0
ELSE	8	2.0	8	8.0
FAMILIES	7	1.7	6	6.0
FAMILY	5	1.2	4	4.0
GOOD	12	3.0	12	12.0
GREAT	5	1.2	5	5.0
HELP	36	8.9	31	31.0
HELPING	18	4.5	14	14.0
HELPS	10	2.5	9	9.0
I	47	11.6	25	25.0
LIFE	14	3.5	12	12.0
LIVES	13	3.2	12	12.0
NEED	15	3.7	13	13.0
ORGAN	19	4.7	15	15.0
ORGANS	14	3.5	14	14.0
OTHERS	38	9.4	36	36.0
PEOPLE	21	5.2	19	19.0
PERSON	6	1.5	5	5.0
SAVE	10	2.5	10	10.0
SAVING	9	2.2	9	9.0
SOMEONE	10	2.5	10	10.0
THING	8	2.0	7	7.0
THINK	19	4.7	11	11.0
TISSUE	10	2.5	9	9.0
WILL	7	1.7	7	7.0

Figure 8A. *Help Others* Dendogram

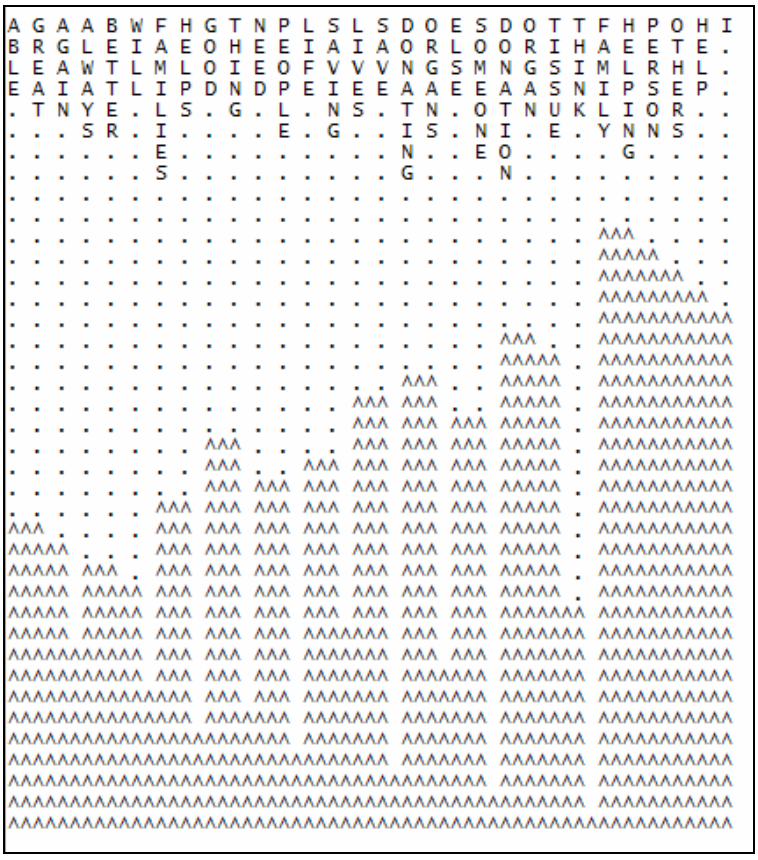


Figure 9A. Most Frequently used Words for *Unsure*

DESCENDING FREQUENCY LIST

WORD	FREQ	PCNT	CASE FREQ	CASE PCNT
I	114	23.2	51	51.5
UNSURE	52	10.6	44	44.4
PEOPLE	30	6.1	25	25.3
AM	27	5.5	23	23.2
THINK	25	5.1	15	15.2
KNOW	21	4.3	16	16.2
ORGAN	19	3.9	14	14.1
ORGANS	18	3.7	17	17.2
WANT	16	3.3	13	13.1
DONATION	14	2.9	10	10.1
SURE	13	2.6	12	12.1
DONATE	11	2.2	10	10.1
LOT	11	2.2	10	10.1
FEEL	9	1.8	7	7.1
ME	9	1.8	8	8.1
PROCESS	9	1.8	8	8.1
REALLY	9	1.8	7	7.1
BODY	8	1.6	8	8.1
DONOR	8	1.6	5	5.1
WHETHER	8	1.6	8	8.1
MIGHT	7	1.4	5	5.1
SOMETHING	7	1.4	6	6.1
THING	7	1.4	7	7.1
DONATING	6	1.2	6	6.1
GUESS	6	1.2	4	4.0
TISSUE	6	1.2	5	5.1
WILL	6	1.2	5	5.1
GOING	5	1.0	5	5.1
GOOD	5	1.0	5	5.1
OTHERS	5	1.0	5	5.1

ALPHABETICALLY SORTED LIST

WORD	FREQ	PCNT	CASE FREQ	CASE PCNT
AM	27	5.5	23	23.2
BODY	8	1.6	8	8.1
DONATE	11	2.2	10	10.1
DONATING	6	1.2	6	6.1
DONATION	14	2.9	10	10.1
DONOR	8	1.6	5	5.1
FEEL	9	1.8	7	7.1
GOING	5	1.0	5	5.1
GOOD	5	1.0	5	5.1
GUESS	6	1.2	4	4.0
I	114	23.2	51	51.5
KNOW	21	4.3	16	16.2
LOT	11	2.2	10	10.1
ME	9	1.8	8	8.1
MIGHT	7	1.4	5	5.1
ORGAN	19	3.9	14	14.1
ORGANS	18	3.7	17	17.2
OTHERS	5	1.0	5	5.1
PEOPLE	30	6.1	25	25.3
PROCESS	9	1.8	8	8.1
REALLY	9	1.8	7	7.1
SOMETHING	7	1.4	6	6.1
SURE	13	2.6	12	12.1
THING	7	1.4	7	7.1
THINK	25	5.1	15	15.2
TISSUE	6	1.2	5	5.1
UNSURE	52	10.6	44	44.4
WANT	16	3.3	13	13.1
WHETHER	8	1.6	8	8.1
WILL	6	1.2	5	5.1

Figure 10A. *Unsure* Dendogram

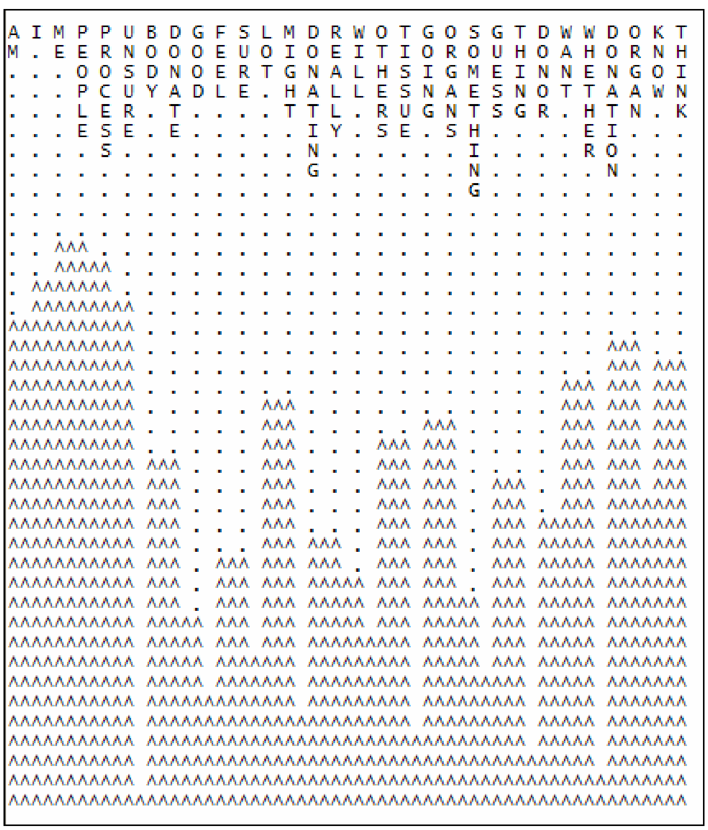


Figure 11A. Most Frequently used Words for *Compassionate*

DESCENDING FREQUENCY LIST

WORD	FREQ	PCNT	CASE FREQ	CASE PCNT
I	50	13.3	31	31.0
COMPASSIONATE	34	9.0	31	31.0
PEOPLE	32	8.5	25	25.0
OTHERS	21	5.6	17	17.0
THINK	19	5.0	16	16.0
COMPASSION	17	4.5	14	14.0
DONATE	16	4.2	16	16.0
ORGAN	14	3.7	12	12.0
PERSON	14	3.7	10	10.0
NEED	11	2.9	9	9.0
ORGANS	11	2.9	11	11.0
HELPING	10	2.7	9	9.0
HELP	9	2.4	9	9.0
KNOW	9	2.4	6	6.0
TISSUE	9	2.4	9	9.0
REALLY	8	2.1	7	7.0
SOMEONE	8	2.1	7	7.0
DONATION	7	1.9	7	7.0
FEEL	7	1.9	5	5.0
GOOD	7	1.9	7	7.0
LIFE	7	1.9	6	6.0
SOMETHING	7	1.9	5	5.0
THING	7	1.9	6	6.0
WANT	7	1.9	6	6.0
YOURSELF	7	1.9	7	7.0
DONATING	6	1.6	6	6.0
GIVING	6	1.6	6	6.0
GUESS	6	1.6	6	6.0
WILL	6	1.6	6	6.0
DONOR	5	1.3	5	5.0

ALPHABETICALLY SORTED LIST

WORD	FREQ	PCNT	CASE FREQ	CASE PCNT
COMPASSION	17	4.5	14	14.0
COMPASSIONATE	34	9.0	31	31.0
DONATE	16	4.2	16	16.0
DONATING	6	1.6	6	6.0
DONATION	7	1.9	7	7.0
DONOR	5	1.3	5	5.0
FEEL	7	1.9	5	5.0
GIVING	6	1.6	6	6.0
GOOD	7	1.9	7	7.0
GUESS	6	1.6	6	6.0
HELP	9	2.4	9	9.0
HELPING	10	2.7	9	9.0
I	50	13.3	31	31.0
KNOW	9	2.4	6	6.0
LIFE	7	1.9	6	6.0
NEED	11	2.9	9	9.0
ORGAN	14	3.7	12	12.0
ORGANS	11	2.9	11	11.0
OTHERS	21	5.6	17	17.0
PEOPLE	32	8.5	25	25.0
PERSON	14	3.7	10	10.0
REALLY	8	2.1	7	7.0
SOMEONE	8	2.1	7	7.0
SOMETHING	7	1.9	5	5.0
THING	7	1.9	6	6.0
THINK	19	5.0	16	16.0
TISSUE	9	2.4	9	9.0
WANT	7	1.9	6	6.0
WILL	6	1.6	6	6.0
YOURSELF	7	1.9	7	7.0

Figure 12A. *Compassionate* Dendogram

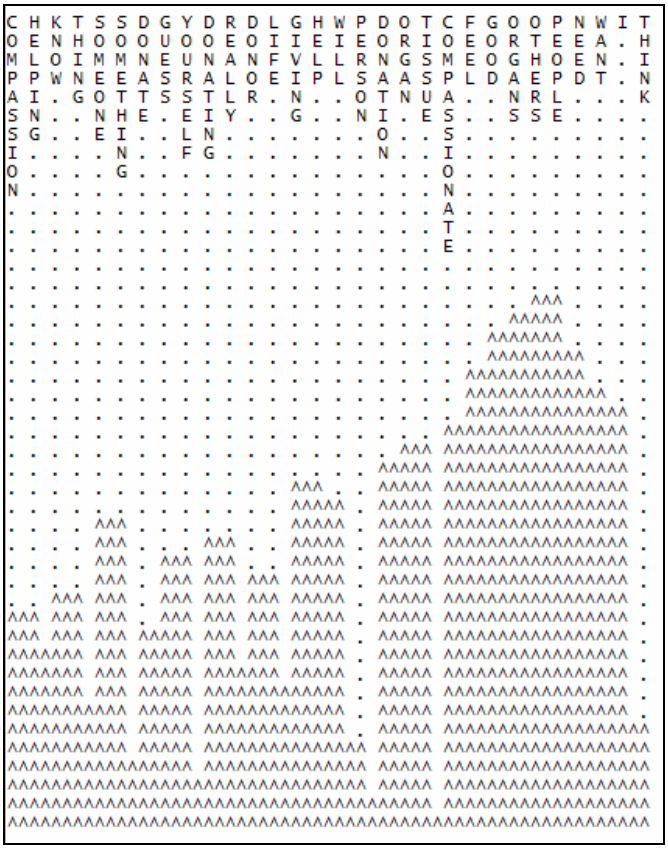


Figure 13A. Most Frequently used Words for *Anxiety*

DESCENDING FREQUENCY LIST

WORD	FREQ	PCNT	CASE FREQ	CASE PCNT
I	71	17.5	39	39.8
THINK	36	8.9	23	23.5
ANXIETY	31	7.6	25	25.5
PEOPLE	24	5.9	18	18.4
ORGAN	19	4.7	18	18.4
ANXIOUS	15	3.7	12	12.2
DONATION	14	3.4	13	13.3
SOMETHING	13	3.2	10	10.2
TISSUE	12	3.0	12	12.2
FAMILY	11	2.7	9	9.2
FEEL	11	2.7	10	10.2
DONATING	10	2.5	10	10.2
KNOW	10	2.5	10	10.2
REALLY	10	2.5	10	10.2
LOT	9	2.2	7	7.1
ME	9	2.2	7	7.1
MIGHT	9	2.2	8	8.2
ORGANS	9	2.2	9	9.2
WANT	9	2.2	8	8.2
WILL	9	2.2	9	9.2
GO	8	2.0	8	8.2
PROCESS	8	2.0	8	8.2
DONATE	7	1.7	7	7.1
THINKING	7	1.7	7	7.1
DIE	6	1.5	6	6.1
DONOR	6	1.5	3	3.1
GOING	6	1.5	5	5.1
SURE	6	1.5	6	6.1
WHOLE	6	1.5	6	6.1
DEATH	5	1.2	5	5.1

ALPHABETICALLY SORTED LIST

WORD	FREQ	PCNT	CASE FREQ	CASE PCNT
ANXIETY	31	7.6	25	25.5
ANXIOUS	15	3.7	12	12.2
DEATH	5	1.2	5	5.1
DIE	6	1.5	6	6.1
DONATE	7	1.7	7	7.1
DONATING	10	2.5	10	10.2
DONATION	14	3.4	13	13.3
DONOR	6	1.5	3	3.1
FAMILY	11	2.7	9	9.2
FEEL	11	2.7	10	10.2
GO	8	2.0	8	8.2
GOING	6	1.5	5	5.1
I	71	17.5	39	39.8
KNOW	10	2.5	10	10.2
LOT	9	2.2	7	7.1
ME	9	2.2	7	7.1
MIGHT	9	2.2	8	8.2
ORGAN	19	4.7	18	18.4
ORGANS	9	2.2	9	9.2
PEOPLE	24	5.9	18	18.4
PROCESS	8	2.0	8	8.2
REALLY	10	2.5	10	10.2
SOMETHING	13	3.2	10	10.2
SURE	6	1.5	6	6.1
THINK	36	8.9	23	23.5
THINKING	7	1.7	7	7.1
TISSUE	12	3.0	12	12.2
WANT	9	2.2	8	8.2
WHOLE	6	1.5	6	6.1
WILL	9	2.2	9	9.2

Figure 14A. *Anxiety* Dendogram

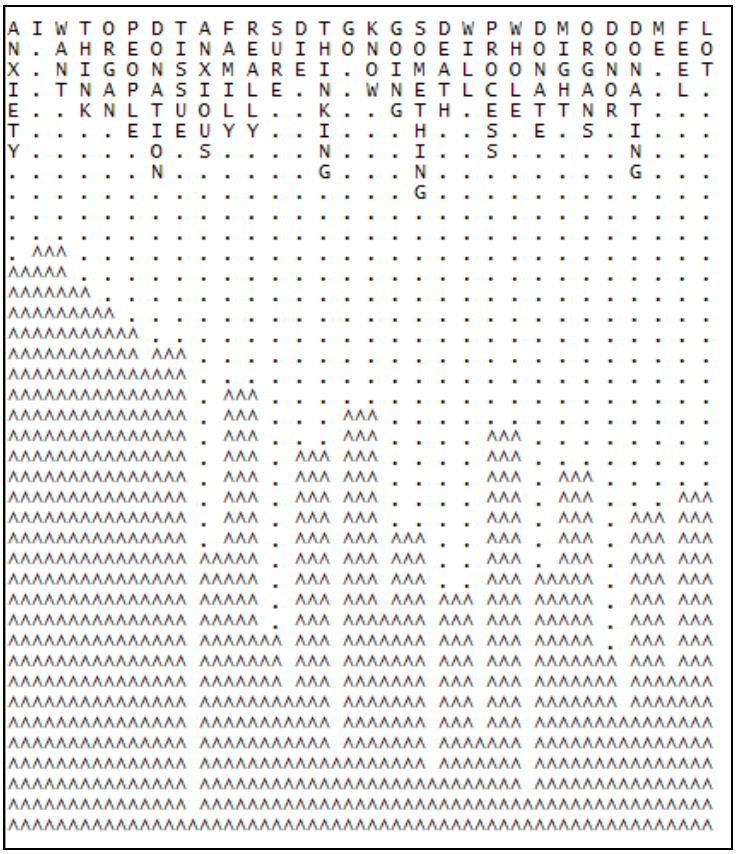


Figure 15A. Most Frequently used Words for *Religious Objections*

DESCENDING FREQUENCY LIST

WORD	FREQ	PCNT	CASE FREQ	CASE PCNT
I	124	24.6	45	45.0
RELIGION	33	6.5	28	28.0
KNOW	29	5.8	18	18.0
THINK	24	4.8	23	23.0
AM	22	4.4	18	18.0
RELIGIONS	21	4.2	20	20.0
RELIGIOUS	19	3.8	17	17.0
DONATION	16	3.2	16	16.0
ORGAN	16	3.2	15	15.0
AGAINST	13	2.6	13	13.0
BELIEVE	12	2.4	10	10.0
ORGANS	12	2.4	10	10.0
REALLY	12	2.4	9	9.0
TISSUE	12	2.4	12	12.0
ANYTHING	11	2.2	11	11.0
SURE	11	2.2	10	10.0
BODY	10	2.0	8	8.0
DONATE	10	2.0	10	10.0
GUESS	10	2.0	8	8.0
PEOPLE	10	2.0	10	10.0
PERSON	9	1.8	8	8.0
SOMETHING	9	1.8	8	8.0
GOOD	8	1.6	8	8.0
LIFE	8	1.6	8	8.0
LOT	8	1.6	7	7.0
CATHOLIC	7	1.4	6	6.0
HELP	7	1.4	6	6.0
ME	7	1.4	6	6.0
MIGHT	7	1.4	7	7.0
OTHERS	7	1.4	6	6.0

ALPHABETICALLY SORTED LIST

WORD	FREQ	PCNT	CASE FREQ	CASE PCNT
AGAINST	13	2.6	13	13.0
AM	22	4.4	18	18.0
ANYTHING	11	2.2	11	11.0
BELIEVE	12	2.4	10	10.0
BODY	10	2.0	8	8.0
CATHOLIC	7	1.4	6	6.0
DONATE	10	2.0	10	10.0
DONATION	16	3.2	16	16.0
GOOD	8	1.6	8	8.0
GUESS	10	2.0	8	8.0
HELP	7	1.4	6	6.0
I	124	24.6	45	45.0
KNOW	29	5.8	18	18.0
LIFE	8	1.6	8	8.0
LOT	8	1.6	7	7.0
ME	7	1.4	6	6.0
MIGHT	7	1.4	7	7.0
ORGAN	16	3.2	15	15.0
ORGANS	12	2.4	10	10.0
OTHERS	7	1.4	6	6.0
PEOPLE	10	2.0	10	10.0
PERSON	9	1.8	8	8.0
REALLY	12	2.4	9	9.0
RELIGION	33	6.5	28	28.0
RELIGIONS	21	4.2	20	20.0
RELIGIOUS	19	3.8	17	17.0
SOMETHING	9	1.8	8	8.0
SURE	11	2.2	10	10.0
THINK	24	4.8	23	23.0
TISSUE	12	2.4	12	12.0

Figure 16A. *Religious Objections* Dendogram

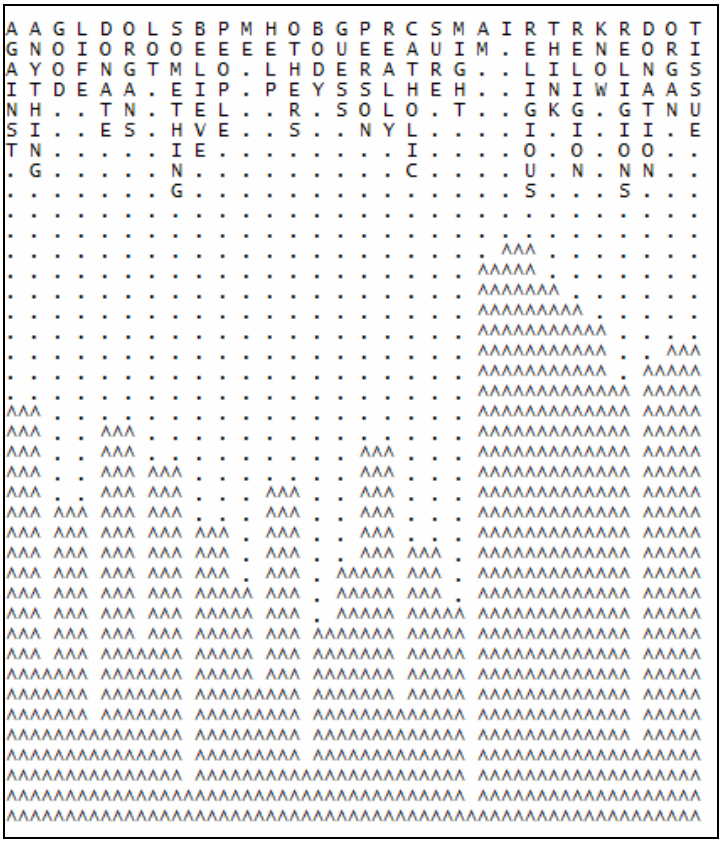


Figure 17A. Most Frequently used Words for *Knowledgeable*

DESCENDING FREQUENCY LIST

WORD	FREQ	PCNT	CASE FREQ	CASE PCNT
I	113	22.8	45	47.4
PEOPLE	46	9.3	33	34.7
KNOWLEDGEABLE	39	7.9	33	34.7
THINK	31	6.2	23	24.2
ORGAN	28	5.6	25	26.3
DONATION	26	5.2	26	27.4
KNOW	26	5.2	20	21.1
TISSUE	18	3.6	17	17.9
AM	16	3.2	14	14.7
KNOWLEDGE	11	2.2	10	10.5
NEED	11	2.2	9	9.5
HELP	10	2.0	10	10.5
LOT	10	2.0	10	10.5
DONATE	9	1.8	9	9.5
ENOUGH	9	1.8	6	6.3
REALLY	9	1.8	6	6.3
GOOD	8	1.6	7	7.4
SOMETHING	8	1.6	8	8.4
DONOR	7	1.4	6	6.3
ISSUE	6	1.2	6	6.3
LIVES	6	1.2	6	6.3
MAYBE	6	1.2	3	3.2
PROBABLY	6	1.2	5	5.3
PROCESS	6	1.2	6	6.3
SOMEBODY	6	1.2	4	4.2
ORGANS	5	1.0	5	5.3
RESEARCH	5	1.0	5	5.3
SAVE	5	1.0	5	5.3
SOMEONE	5	1.0	5	5.3
SUBJECT	5	1.0	3	3.2

ALPHABETICALLY SORTED LIST

WORD	FREQ	PCNT	CASE FREQ	CASE PCNT
AM	16	3.2	14	14.7
DONATE	9	1.8	9	9.5
DONATION	26	5.2	26	27.4
DONOR	7	1.4	6	6.3
ENOUGH	9	1.8	6	6.3
GOOD	8	1.6	7	7.4
HELP	10	2.0	10	10.5
I	113	22.8	45	47.4
ISSUE	6	1.2	6	6.3
KNOW	26	5.2	20	21.1
KNOWLEDGE	11	2.2	10	10.5
KNOWLEDGEABLE	39	7.9	33	34.7
LIVES	6	1.2	6	6.3
LOT	10	2.0	10	10.5
MAYBE	6	1.2	3	3.2
NEED	11	2.2	9	9.5
ORGAN	28	5.6	25	26.3
ORGANS	5	1.0	5	5.3
PEOPLE	46	9.3	33	34.7
PROBABLY	6	1.2	5	5.3
PROCESS	6	1.2	6	6.3
REALLY	9	1.8	6	6.3
RESEARCH	5	1.0	5	5.3
SAVE	5	1.0	5	5.3
SOMEBODY	6	1.2	4	4.2
SOMEONE	5	1.0	5	5.3
SOMETHING	8	1.6	8	8.4
SUBJECT	5	1.0	3	3.2
THINK	31	6.2	23	24.2
TISSUE	18	3.6	17	17.9

Figure 18A. *Knowledgeable* Dendogram

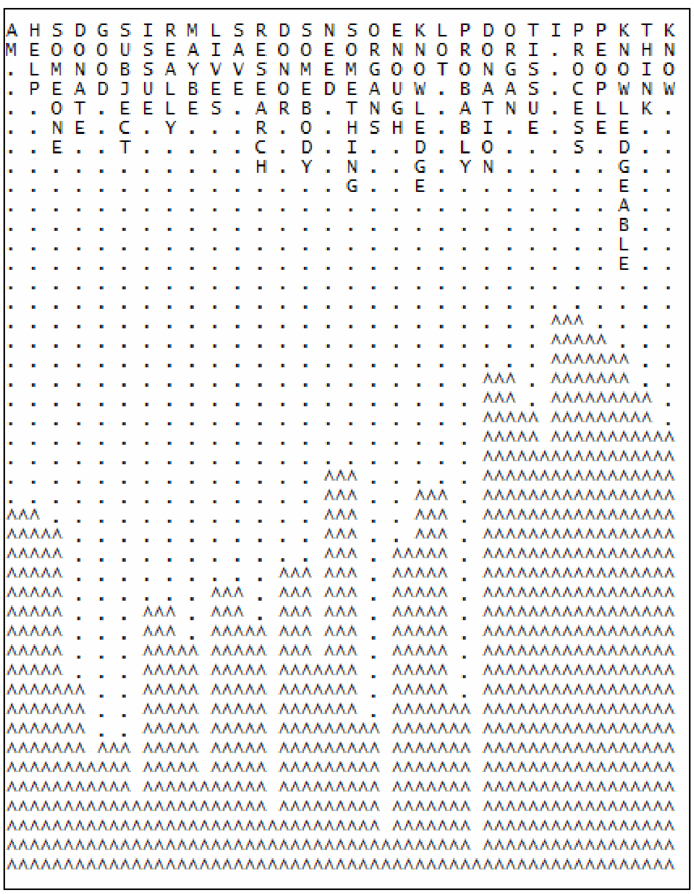


Figure 19A. Most Frequently used Words for *Discussion with Others*

DESCENDING FREQUENCY LIST					ALPHABETICALLY SORTED LIST				
WORD	FREQ	PCNT	CASE FREQ	CASE PCNT	WORD	FREQ	PCNT	CASE FREQ	CASE PCNT
I	78	17.8	38	39.6	DISCUSS	16	3.6	14	14.6
PEOPLE	30	6.8	24	25.0	DISCUSSED	10	2.3	9	9.4
THINK	24	5.5	18	18.8	DISCUSSING	10	2.3	10	10.4
FAMILY	23	5.2	21	21.9	DISCUSSION	9	2.1	9	9.4
ORGAN	21	4.8	16	16.7	DONATE	10	2.3	8	8.3
OTHERS	20	4.6	20	20.8	DONATION	9	2.1	9	9.4
TALK	20	4.6	14	14.6	FAMILY	23	5.2	21	21.9
WANT	19	4.3	12	12.5	FEEL	11	2.5	11	11.5
KNOW	17	3.9	16	16.7	FRIENDS	9	2.1	9	9.4
DISCUSS	16	3.6	14	14.6	GOING	6	1.4	5	5.2
REALLY	14	3.2	10	10.4	GOOD	6	1.4	6	6.2
FEEL	11	2.5	11	11.5	GUESS	7	1.6	3	3.1
DISCUSSED	10	2.3	9	9.4	I	78	17.8	38	39.6
DISCUSSING	10	2.3	10	10.4	IMPORTANT	9	2.1	7	7.3
DONATE	10	2.3	8	8.3	ISSUE	6	1.4	6	6.2
NEVER	10	2.3	10	10.4	KNOW	17	3.9	16	16.7
TOPIC	10	2.3	8	8.3	ME	6	1.4	6	6.2
DISCUSSION	9	2.1	9	9.4	NEVER	10	2.3	10	10.4
DONATION	9	2.1	9	9.4	OPEN	6	1.4	4	4.2
FRIENDS	9	2.1	9	9.4	ORGAN	21	4.8	16	16.7
IMPORTANT	9	2.1	7	7.3	OTHERS	20	4.6	20	20.8
TELL	8	1.8	7	7.3	PARENTS	7	1.6	6	6.2
TISSUE	8	1.8	7	7.3	PEOPLE	30	6.8	24	25.0
GUESS	7	1.6	3	3.1	REALLY	14	3.2	10	10.4
PARENTS	7	1.6	6	6.2	TALK	20	4.6	14	14.6
GOING	6	1.4	5	5.2	TELL	8	1.8	7	7.3
GOOD	6	1.4	6	6.2	THINK	24	5.5	18	18.8
ISSUE	6	1.4	6	6.2	TISSUE	8	1.8	7	7.3
ME	6	1.4	6	6.2	TOPIC	10	2.3	8	8.3
OPEN	6	1.4	4	4.2	WANT	19	4.3	12	12.5

Figure 20A. *Discussion with Others* Dendogram

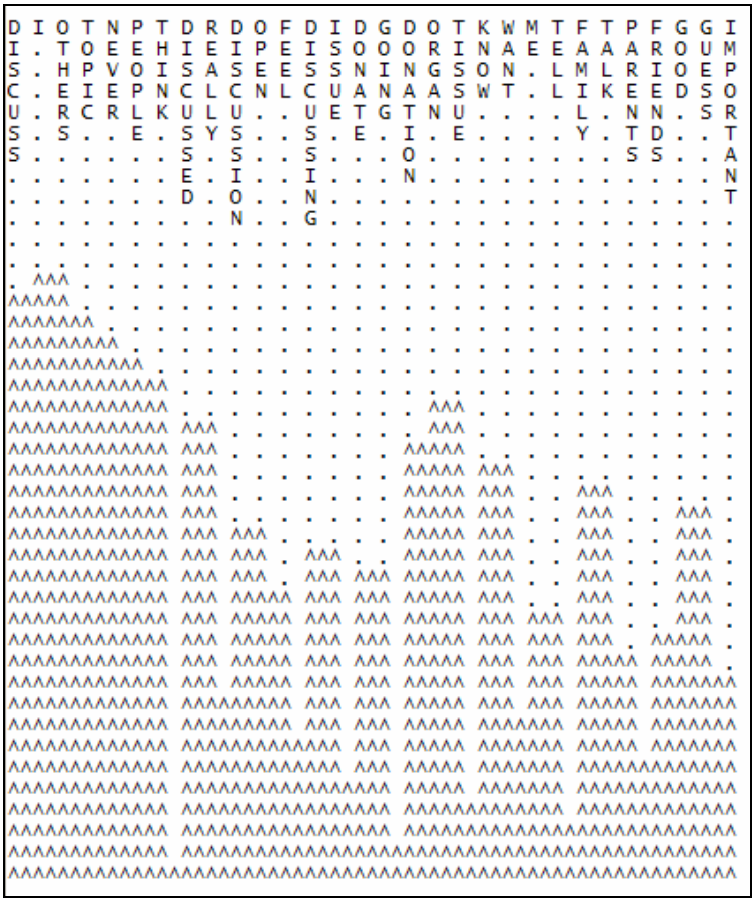


Figure 21A. Most Frequently used Words for *Body Wholeness*

DESCENDING FREQUENCY LIST

WORD	FREQ	PCNT	CASE FREQ	CASE PCNT
I	97	23.9	47	50.0
BODY	39	9.6	32	34.0
THINK	30	7.4	21	22.3
WHOLE	21	5.2	20	21.3
ME	16	3.9	14	14.9
DEAD	12	3.0	11	11.7
DIE	11	2.7	10	10.6
KNOW	11	2.7	9	9.6
ORGANS	11	2.7	11	11.7
PEOPLE	11	2.7	10	10.6
WANT	10	2.5	8	8.5
WHOLENESS	10	2.5	7	7.4
AM	9	2.2	8	8.5
FEEL	9	2.2	8	8.5
REALLY	9	2.2	8	8.5
BURIED	8	2.0	7	7.4
GOOD	8	2.0	6	6.4
WILL	8	2.0	7	7.4
HELP	7	1.7	5	5.3
LIFE	7	1.7	6	6.4
PART	7	1.7	7	7.4
SOMETHING	7	1.7	7	7.4
AWAY	6	1.5	6	6.4
BELIEVE	6	1.5	5	5.3
DONATE	6	1.5	6	6.4
ELSE	6	1.5	5	5.3
GO	6	1.5	4	4.3
GOING	6	1.5	4	4.3
MATTER	6	1.5	6	6.4
NEED	6	1.5	6	6.4

ALPHABETICALLY SORTED LIST

WORD	FREQ	PCNT	CASE FREQ	CASE PCNT
AM	9	2.2	8	8.5
AWAY	6	1.5	6	6.4
BELIEVE	6	1.5	5	5.3
BODY	39	9.6	32	34.0
BURIED	8	2.0	7	7.4
DEAD	12	3.0	11	11.7
DIE	11	2.7	10	10.6
DONATE	6	1.5	6	6.4
ELSE	6	1.5	5	5.3
FEEL	9	2.2	8	8.5
GO	6	1.5	4	4.3
GOING	6	1.5	4	4.3
GOOD	8	2.0	6	6.4
HELP	7	1.7	5	5.3
I	97	23.9	47	50.0
KNOW	11	2.7	9	9.6
LIFE	7	1.7	6	6.4
MATTER	6	1.5	6	6.4
ME	16	3.9	14	14.9
NEED	6	1.5	6	6.4
ORGANS	11	2.7	11	11.7
PART	7	1.7	7	7.4
PEOPLE	11	2.7	10	10.6
REALLY	9	2.2	8	8.5
SOMETHING	7	1.7	7	7.4
THINK	30	7.4	21	22.3
WANT	10	2.5	8	8.5
WHOLE	21	5.2	20	21.3
WHOLENESS	10	2.5	7	7.4
WILL	8	2.0	7	7.4

Figure 22A. *Body Wholeness* Dendogram

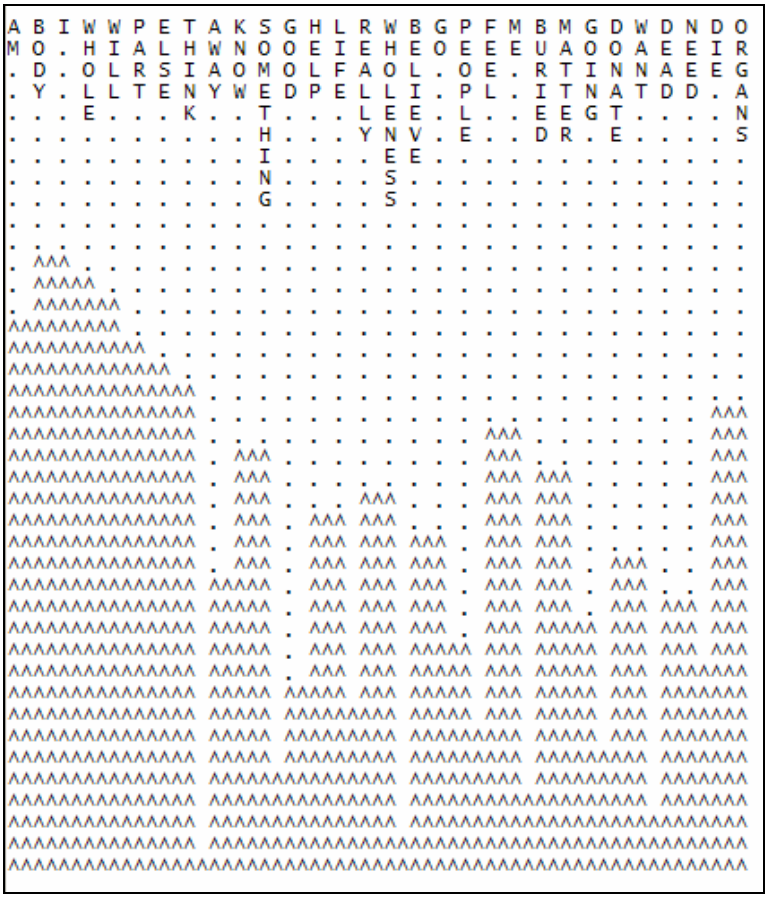


Figure 23A. Most Frequently used Words for *Good*

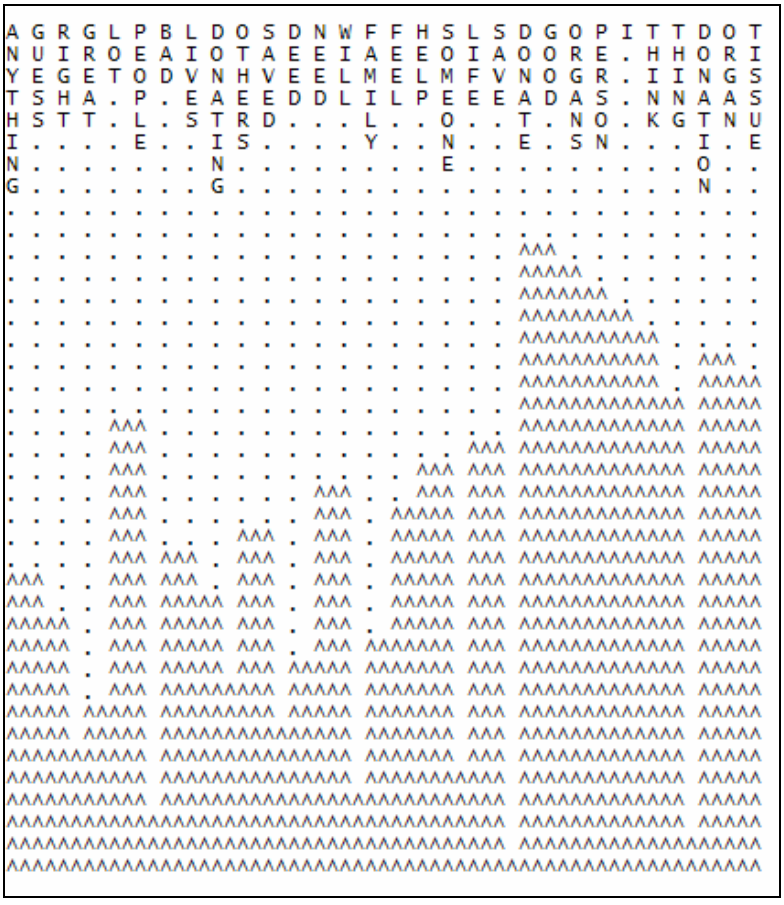
DESCENDING FREQUENCY LIST

WORD	FREQ	PCNT	CASE FREQ	CASE PCNT
GOOD	83	19.5	62	63.9
I	56	13.1	32	33.0
THINK	31	7.3	22	22.7
THING	23	5.4	19	19.6
PEOPLE	19	4.5	16	16.5
ORGAN	17	4.0	16	16.5
DONATION	14	3.3	13	13.4
HELP	14	3.3	13	13.4
DONATE	12	2.8	11	11.3
LIFE	12	2.8	12	12.4
ORGANS	11	2.6	10	10.3
OTHERS	11	2.6	11	11.3
SOMEONE	11	2.6	10	10.3
TISSUE	11	2.6	10	10.3
LOT	9	2.1	5	5.2
FAMILY	8	1.9	6	6.2
FEEL	8	1.9	6	6.2
GREAT	8	1.9	5	5.2
LIVES	7	1.6	7	7.2
NEED	7	1.6	6	6.2
RIGHT	7	1.6	6	6.2
WILL	7	1.6	5	5.2
DONATING	6	1.4	6	6.2
PERSON	6	1.4	5	5.2
BAD	5	1.2	4	4.1
GUESS	5	1.2	4	4.1
SAVE	5	1.2	5	5.2
SAVED	5	1.2	5	5.2
ANYTHING	4	0.9	3	3.1
DEED	4	0.9	4	4.1

ALPHABETICALLY SORTED LIST

WORD	FREQ	PCNT	CASE FREQ	CASE PCNT
ANYTHING	4	0.9	3	3.1
BAD	5	1.2	4	4.1
DEED	4	0.9	4	4.1
DONATE	12	2.8	11	11.3
DONATING	6	1.4	6	6.2
DONATION	14	3.3	13	13.4
FAMILY	8	1.9	6	6.2
FEEL	8	1.9	6	6.2
GOOD	83	19.5	62	63.9
GREAT	8	1.9	5	5.2
GUESS	5	1.2	4	4.1
HELP	14	3.3	13	13.4
I	56	13.1	32	33.0
LIFE	12	2.8	12	12.4
LIVES	7	1.6	7	7.2
LOT	9	2.1	5	5.2
NEED	7	1.6	6	6.2
ORGAN	17	4.0	16	16.5
ORGANS	11	2.6	10	10.3
OTHERS	11	2.6	11	11.3
PEOPLE	19	4.5	16	16.5
PERSON	6	1.4	5	5.2
RIGHT	7	1.6	6	6.2
SAVE	5	1.2	5	5.2
SAVED	5	1.2	5	5.2
SOMEONE	11	2.6	10	10.3
THING	23	5.4	19	19.6
THINK	31	7.3	22	22.7
TISSUE	11	2.6	10	10.3
WILL	7	1.6	5	5.2

Figure 24A. *Good* Dendogram



Appendix D

Interview Transcript

Interview Transcript

Tuesday February 14, 2006

Subject # 1 (Female, Nondonor)

Principal Investigator (PI): Please tell me what you think about organ and tissue donation…your feelings, attitudes, and/or beliefs about the topic.

S1: I'm not a donor, but…and I don't know, I don't know if I feel comfortable donating, but I do think that if people choose to do it, that it is a good thing for them to do. I'm not against organ and tissue donation myself, but I don't know I don't feel comfortable doing it.

PI: Do you have any specific reasons why not?

S1: No, just, I don't know, my own thoughts about it; my own beliefs about it. No, nothing specific.

PI: You said you have not enrolled or registered.

S1: No.

PI: I will read off a series of words that are often used in relation to OTD, please respond by telling me what first comes to mind when you hear it. If you don't think of anything, that's fine. We'll just skip it and go to the next one. The first one is SAVE LIVES.

S1: It does, I think it can. and if people are in need of it, it's good that it's out there. It can potentially save lives.

PI: Okay. The next one is HELP OTHERS.

S1: Yes, it goes along with the same thing. Again, if someone is in need of an organ or some transplant it's there for them which is good that they have the option. That there's something available.

PI: UNSURE

S1: That's how I feel about it. For myself.

PI: Okay. COMPASSIONATE.

S1: I think you have to be compassionate in order to donate and to be involved in it.

PI: Okay, ANXIETY.

S1: I think people that donate and do get donated organ do get anxiety because they're not sure like where it's gonna go and who it comes from.

PI: Okay, RELIGION.

S1: I don't know if it's accepted in all religions, so…I don't think it is. I don't know each religion's point of view on it.

PI: KNOWLEDGEABLE…

S1: You need to have some knowledge in it in order to donate or to get a donation. I think you should research it before you make up your final decision.

PI: Okay, how about DISCUSSION WITH OTHERS?

S1: Like now…it's good to like, talk about it and see how other people see it and what other people's point of views are. But, I think you should have your own point of view on it before you get swayed by others.

PI: BODY WHOLENESS…

S1: I think it's good to be in good health if you're gonna donate, because potentially if you're not in good health then you might be putting another person at risk.

PI: And, the last one is GOOD.

S1: I think it's a good thing to do, uhm…if you're familiar with it and if you're comfortable with it and if you've researched it and looked into it and it's a decision you've come to based on your feelings about it. I think it's a very good thing to do.

PI: Okay, Is there anything else that you would like to add, anything that maybe we didn't cover; that is left over that you would like to say?

S1: I would like to look into it more and research myself and see what you can do and what organs can be donated and what people need.

Subject # 2 (Male, Nondonor)

PI: Tell me what you think about organ and tissue donation; your thoughts, feelings, beliefs, attitudes. And, if you don't particularly have any that's okay too.

S2: Well, what…okay when you say organ and tissue donation, what do you mean when you ask me that question?

PI: The prospect of donating your organs or the whole idea of it; the concept of it.

S2: The concept of it; that's a good question. It's kind of funny because I definitely am…I mean I would choose to be an organ donator, I don't think I am now. But I firmly believe in it, but I think my mom is not like she is…because I think my little brother tried to do it but she got really upset and like freaked out and…but just to see how upset that she got makes me not want to do it just for that sake. But I guess if something happened to me before she passed away, that's kind of bad, but I guess I would want to be one. But, I'd like to choose to be one, if that makes sense, but I just don't want to upset her at the same time. And, it's not like she runs my life, you know what I'm saying, I'd just rather not have her all worried about if that is a thing she worries about. But, yeah, I'm a firm believer of it, I mean…I think…I guess it goes against people's religion some, I don't know how other people think about it but for me I think it'd be great because you get to help other people I mean it's…I don't see how it's against my own religion because in a way, even when I'm passed away, then I think it says something about…I don't know what it says exactly, like I said the bible or whatnot, but I would think that giving my organs away would be a better chance for me to go into heaven if there is one or that whole subject. So, I guess, I think I'm eventually gonna be one…I'm a firm believer of it.

PI: So, then would you say, maybe, the only reason, the only thing that's holding you back is the thought of your family objecting to it?

S2: Yeah, I would say that. I wouldn't…I've never really said that I've talked to them about it, so I don't wanna say that they're kind of biased towards it. I just know that it really upsets her, so I guess I wanna, I just, I decided not to persue it because I knew it just wasn't worth upsetting her that much. I've upset her in a lot of other things in life, but I'm saying in this aspect I'd rather not…you know…because it is a serious issue, so it's easier to say than to fill it out. Because once you do fill it out you understand that your organs are gonna be spread across the world to certain people. Which is a benefit, but then it's a lot to take in before you actually go.

PI: Okay…now I'm going to say some words or phrases related to organ donation and the transplantation process and I would like you to tell me what comes to mind when you think about them. The first is SAVES LIVES.

S2: Yes. (Laughs) I agree.

PI: Okay. HELPS OTHERS.

S2: Yeah.

PI: Okay. UNSURE.

S2: Unsure. Yes. Unsure in the fact that…what do you mean?

PI: For you what does unsure mean in terms of organ and tissue donation?

S2: I guess I'm unsure how…unsure getting past the fact that it's okay to do and instead of worrying about it. Because I think first thing I'd think, were I to become an organ and tissue donator, would be the family and then is, man, that's a big responsibility to myself in a way, and then of course to others. So, I guess unsure in the aspect that would I be okay doing this. I kind of weird because right now I don't think there's a problem being one, and I don't think it would be a problem if I am one. Because if I do pass away, or if something happens then I don't even know if where my organs are going. So it seems that unsure is just the main theme because I don't know about anything.

PI: Okay, how about COMPASSIONATE?

S2: Yeah, definitely it's a compassionate move, I imagine. Yeah easily.

PI: Alright. ANXIETY.

S2: Yes. I think this issue causes anxiety. Not for the donor, I don't think because he or she chose to be a donor, but I think for the family. Say I chose to be a donor and my mom, say I pass away before she did, and she'd know finally that I'd chosen to be one. I imagine her anxiety level would go up a little bit. She probably wouldn't be happy.

PI: Okay, RELIGION.

S2: Yeah. That's got to be a big issue considering that's what I was basing my answers off of; because so many people, I mean religion is such a big thing in everybody's lives, so I imagine this does not go along with a lot of religions out there. I imagine there's got to be something out there that denies having to do with something like this.

PI: How about KNOWLEDGEABLE?

S2: I think knowledgeable, I'm knowledgeable about what it is and what happens, I guess, but I'm not knowledgeable about the statistics and about how many people it helps if I do become one. So, I don't know much about how many people are on the waiting list for a kidney, of course there is probably a lot, but I don't know exactly. I think if I knew the exact numbers I'd be a little bit more willing to go. You know, if someone else needs help or if I find out if some little girl that was poor needs one, I'd probably be all about it.

PI: Okay. DISCUSSION WITH OTHERS.

S2: Not really. I guess my friends are all football players and they're not really into discussing organ and tissue donating. We don't talk about anything except b.s. I guess. So yeah, I don't really talk to anybody. But I guess I talk to my brothers about this, about discussions about what they think about it. One brother thinks it's not good, the other thinks it is. So, I guess we discuss it sometimes.

PI: BODY WHOLENESS.

S2: Wholeness…body wholeness…that strikes up a lot of things to think about. Body wholeness, so do you mean in the aspect of body wholeness…I'm thinking of it as like you're whole after you, when you pass away…in that sort?

PI: Some religions, like Buddhism, advocate a wholistic approach so that those practicing these religions are not so inclined to donate because of reincarnation and the fact that they have to keep the body whole.

S2: I believe…that's another thing I don't know about my own religion and of course I consider myself religious but I don't know much about it. So, I don't know much about the fact but either way I would still want to donate given that, taking the chance that I don't reincarnate into something else that I would be helping someone that is living now.

PI: I have one more…GOOD.

S2: Yes, it's very good, I think. I think it's a great thing for the people, of course, it's a great thing to do altogether, everyone's benefiting. It just depends if the person can deal with an afterlife or not and it depends if the family can deal with it as well, I imagine. As long as they say it's okay, I think it's great in every aspect.

Subject # 3 (Female, Donor)

PI: Please tell me what you think, feel, what your attitudes and beliefs are toward organ donation.

S3: Well, I believe that it's a good thing. I signed an organ donor card two semesters ago…I took Advanced Public Relations, so I signed a donor card. I think it's a good thing because it benefits a lot of people.

PI: Okay. Do you have any other particular beliefs or attitudes other than that it's good? Anything else?

S3: I know there's a lot of religious issues surrounding it. I'm a Christian, myself, and I don't see anything wrong with it. I never really talked with my pastor, or anything, about it, but I don't feel like there's anything wrong with it if it's gonna be used to help someone else.

PI: Okay. The next part I am going to say a series of words and I would like you to respond by telling me the first thing that comes to mind when you hear them…in relation to organ and tissue donation. The first one is SAVE LIVES.

S3: Hope.

PI: Okay. HELP OTHERS.

S3: It's a good thing to do.

PI: UNSURE.

S3: Understandable.

PI: Okay. COMPASSIONATE.

S3: Human.

PI: ANXIETY.

S3: Also understandable.

PI: How so?

S3: The anxiety, I think, is very understandable because when you're grieving you're not really thinking of anyone else's situation. You're dealing with your current situation that you just lost a loved one. Maybe, like, you're very unsure if you want to do this because you may feel like you're harming the deceased person or something.

PI: Okay. RELIGION.

S3: A variable, I guess.

PI: Okay. KNOWLEDGEABLE.

S3: I would say, like, ignorance because a lot of people aren't knowledgeable.

PI: How about DISCUSSION WITH OTHERS?

S3: Difficult.

PI: Okay. In just bringing up the topic?

S3: Yeah, it's hard because, obviously, it relates to death. So, if you want to tell your loved ones that you want to donate, they have to think of you first passing.

PI: Okay. How about BODY WHOLENESS?

S3: I feel like as long the body itself is intact as far as the outer appearance, the limbs, the inside is not showing, so…

PI: And, the last one is GOOD.

S3: Can I say good for GOOD? Yeah, I think it is true, it is true.

PI: Okay, thank you very much.

Subject # 4 (Male, Nondonor)

PI: The first question is open-ended. If you would just tell me what you think about organ and tissue donation, any of your feelings, your attitudes, any beliefs that you might hold about organ donation or the whole process of transplantation.

S4: Well, I don't know too much about the specifics of it. I know that I never really thought about it until I've known people who needed lung transplants and basically reconsider everything. I would be an organ and tissue donator, I understand how much it helps. I see no problem with it.

PI: So, you're not an organ donor right now?

S4: No.

PI: So, what do you think is keeping you from becoming an organ donor?

S4: As sad as it sounds, the whatever small step it takes to put yourself in that category. The back of your license…something like that. Is that how it works?

PI: Well, there are a couple of different ways. But, it's just inconvenient, it's not easy to do?

S4: Yes. I don't want to call it an inconvenience. I just…I don't believe that it's tough to do.

PI: But, you've never been presented with that option.

S4: Yeah.

PI: Okay. The next part is just a series of words and I would like you to tell me what comes to mind when you think of these words in relation to organ donation and the transplantation process. The first one is SAVE LIVES.

S4: Save lives. I'm all for it. I think it's a great idea, I see nothing wrong with it. I'm sure some people are against it, I think that's ridiculous. And, it's your decision; your own personal decision. If you want to save a life, go right ahead.

PI: Okay, the next one is HELP OTHERS.

S4: I'm all for it. It's…again, I see no problem with it. Some people do. Helping others is fine. More research. Save a life of a personal friend isn't bad.

PI: Okay. How about UNSURE?

S4: I'm not unsure about organ donation. I just feel real sure.

PI: Okay, COMPASSIONATE.

S4: I think you become more compassionate about it if you have a first hand experience with somebody who needs an organ and tissue donation.

PI: ANXIETY.

S4: I think anxiety would come from someone who is waiting for an organ and tissue donation.

PI: Okay, how about RELIGION?

S4: Again, I don't know too much of the specifics. I'm not sure if there is a religion that's against it. I guess I should know this, but I don't think religion should have anything to do with it.

PI: Actually, most are for it. Very few are against donation, like the Orthodox Jewish religion which doesn't allow even tattooing of the body. But, most of them support it.

S4: Yeah.

PI: The next one is KNOWLEDGEABLE.

S4: It saves lives and, I mean that's knowledgeable. Research, studies anything like that you can gain knowledge I say for organ and tissue donation.

PI: Okay, how about DISCUSSION WITH OTHERS?

S4: What kind of answers would you like? Discussion with others…

PI: If nothing really comes to mind, that's okay. We can move on. It's up to you. It's completely what you think about it, so if you have no thought about that…

S4: Yeah, I have no thought about it.

PI: That's okay. How about BODY WHOLENESS?

S4: What do you mean?

PI: Some religions, like the Hindu religion, stress keeping the body whole for reincarnation purposes.

S4: If that's what you believe, then, go right ahead. I don't think it's a very big deal to me.

PI: Okay, the last one is GOOD.

S4: I think it's great.

PI: Is there anything else that maybe we didn't cover that you want to say more about?

S4: Not that I can think of.

Subject # 5 (Male, Nondonor)

PI: Okay, so first off, I would just like for you to tell me what you think about organ and tissue donation. What you think, your thoughts.

S5: Well, I don't know too much about it. I would probably have to do some research about it to answer a question about it. But, going off the name…organ and tissue…

PI: Donation.

S5: Donation. Basically, is that organ donation, or just…?

PI: Well,…

S5: Or just certain organs?

PI: That's really up to you. A lot of times if you were to say that you want to be an organ donor, you can choose to donate maybe just your kidneys or something.

S5: Okay, I remember seeing that on the New York State license you have to sign the back or something like that. I'm not necessarily a fan of it. Just because…maybe if it was a family member I would go out of my way, but not for a normal stranger. It's not that I don't help people, I guess, it's like I don't have that connection with them.

PI: Okay. Are there any other reasons that might come into your decision to not be a donor.

S5: Not to be a donor, no. The only reason if…like…I feel God tells me that…gives me a sign that I have to do this for this person.

PI: Okay, so you need more of a familial tie with someone and some religious aspects come into play too?

S5: Yes.

PI: Okay. Now for the next part, I am going to say a word or phrase and if you could just tell me what comes to mind when you think about it in relation to organ and tissue donation.

S5: Like looking at pictures?

PI: Yeah, kind of. So, the first one is SAVE LIVES.

S5: It's good to save people's lives, I would say. But, then again, there are certain people, but I'm not here to judge anybody.

PI: Okay. HELP OTHERS.

S5: Helping others is good, more people need to do it. But, I'm not sure about the whole thing.

PI: Okay, the next one is UNSURE.

S5: Yeah, I'm not too sure about it.

PI: Okay, COMPASSIONATE.

S5: I've been told that I can be compassionate. But, it's also…I guess it depends on the situation, how bad a story the person has. If the person has been through it all…(cannot make out the rest of answer)

PI: ANXIETY.

S5: I don't get too anxious about things because if you get too anxious…I like to have a hands on kind of thing. I have to be in control of my situation. That's why with the organ donation thing, like I said it would have to be for family, that's more of a hands on type of thing.

PI: Okay, you've kind of said this before, but RELIGION.

S5: Good.

PI: Okay, but in terms of organ and tissue donation, how would you say that religion fits into that?

S5: I'm not to sure if the Bible says anything about it…transferring…kind of…of your body parts to another. But, I know God wants us to physically help out each other, no matter how big of a jerk or how bad of a person somebody might be you always have to be there for others. There are plenty of ways to help others besides organ and tissue donation.

PI: Okay, how about KNOWLEDGEABLE?

S5: I'm not too knowledgeable on the subject, actually. I've seen *John Q*. That kind of correlates with this.

PI: Okay. DISCUSSION WITH OTHERS.

S5: Only in class, if somebody came in. That was probably the only time I have ever had a conversation about it.

PI: BODY WHOLENESS.

S5: I feel if it's my time to go, then it's my time to go and my body has to go with me.

PI: Okay, and then there's just one more…GOOD.

S5: Is it good…I guess, yeah. It could be good because you help out people. But a lot of thing can happen…there can be an accident…you may not have the right blood…anything can go wrong.

PI: Is there anything else that you would like to add that maybe we didn't cover? With those words, or anything else in general?

S5: What is your point of view on the topic?

Subject # 6 (Female, Nondonor)

PI: The first question is just for you to tell me what you think about organ and tissue donation. Any of your feelings, your thoughts, attitudes, beliefs…

S6: I think that organ and tissue donation should be done. I actually did a report on it, kind of, too. So, I had some questions, like about the myths about it that I was learning about, like, if something was to happen to me, my body wouldn't survive, I mean they wouldn't try to rescue me because somebody else needs it. But, I found out that was a lie and a lot of other questions I have, like, it doesn't hurt my religion or anything, so. I think I would do it. I would encourage people to….I would encourage people to, but I'm not sure that I would necessarily. But, I think I would, yeah, I think I would.

PI: So, right now you're not an organ donor?

S6: No, I'm not.

PI: So, what do you think is keeping you from…

S6: Because even though I understand that those are myths, I still believe there's a little truth behind them.

PI: Okay, so it's still a question about whether or not they'll help you if you need to be helped?

S6: Right. Because I know that's the right thing to say, I understand that they…like…legally they're not supposed to and I understand all that. But, I think there's ways of getting beyond that. You know, with money and stuff. So…I think I could get paid out to give…

PI: Okay. In this next part I am going to say a series of words or phrases related to organ and tissue donation and I would like you to tell me what comes to mind when you think about these, when you initially hear them. The first one is SAVE LIVES.

S6: Organ and tissue donation saves lives. That's what I think about.

PI: Okay, HELP OTHERS.

S6: I think that if someone does die and, although it hurts, it helps others. You know that by donating your tissues that somebody else will get helped. So, I think it's a good reason to do it.

PI: UNSURE

S6: I think a lot of people are unsure because those myths, even though we know legally they're untrue, I think there's always truth behind that. I think people are scared and unsure if they want to do it.

PI: Okay, COMPASSIONATE.

S6: I think of showing compassion for someone else's family that may be losing someone, if you can donate own child's or whoever's tissue and organs.

PI: Okay, how about ANXIETY?

S6: You get nervous thinking about it. I think you get anxious because you do realize everyone's gonna die and it's a decision you should do. But I think people postpone it because they just don't want to think about it. So, it brings up…being anxious actually just makes you not want to think about it at all.

PI: Okay, RELIGION.

S6: I thought that as a Catholic I was not able to donate my tissues. I'm not really sure, but I just figured because once you end you're not supposed to. But, I also read that that's not true, that actually religions condone giving because it's like sharing. But, that's what I think.

PI: Okay, how about KNOWLEDGEABLE?

S6: I think that there's a lot of questions that people have, and since they don't have enough knowledge on it they don't want to make a decision. But, I think once you hear that all the pros there's not enough cons to, kind of, keep you from donating. But I think the more knowledgeable you are the easier the choice would be.

PI: Okay, how about DISCUSSION WITH OTHERS?

S6: No one I know ever talks about whether they're going to donate their organs and tissues. So, I think it doesn't come up in a discussion and it should. More people should ask their friends, "Would you donate your organs?".

PI: The next one is BODY WHOLENESS.

S6: Like, you think that donating your organs as if you're getting pieces of yourself cut off and it's like you having an open casket funeral. So, instead of helping you think of something getting taken away from you when you're dead. I think you think of you don't have any.

PI: The last one I have is GOOD.

S6: I think it's good to go donate your organs. I think it's right; it will help someone. And, you feel good about it when you hear the stories of those you saved.

PI: Okay, is there anything else that didn't come up in this series of words that you think of when you think about organ and tissue donation?

S6: I think you should maybe have FUNERAL in there. That word made me think of open casket funeral, that's another, that's like the main fear I think people have – that my body's gonna look horrible in the casket.

PI: Is that part of your anxiety and unsureness about it?

S6: Yeah, that too. Because I heard you can even donate your eyes and in the casket you can't tell there's nothing wrong, but I don't know how sure that is either.

PI: So, when you were talking about more people getting knowledge, the way that you got more knowledge and so you felt a little more comfortable about it. Do you think that talking to people who actually do the transplants would make you feel more sure about whether or not? To get more information, one-on-one with people who…

S6: Or, maybe like people who had a member of the family did pass and you know they maybe see why they did it, see if it paid off, would they do it again.

PI: Anything else?

S6: No, that's it.

Subject # 7 (Female, Nondonor)

PI: First off, I would just like you to tell me what it is you think about when you think about organ and tissue donation. If you have any beliefs surrounding it or attitudes, feelings, anything.

S7: I think it's a good thing. I don't know if I would personally do it, but I do think obviously that it helps a lot of people and overall it's a good thing. I had a friend who actually…she was a senior in high school and she died and she gave her organ up and I think she helped a little girl. So, I do. I feel strongly about it. I don't know if I would personally do it, but…

PI: Okay, so you're not an organ donor right now?

S7: No, I'm not.

PI: What do you think is keeping you from becoming a donor?

S7: Just the fact that I think I want my body to be kept after I die and kept like it is.

PI: So, the next part if our interview I am going to say a series of words or phrases and whatever first comes to your mind when you hear it. SAVE LIVES is the first one.

S7: Helpful.

PI: HELP OTHERS.

S7: Good.

PI: Okay, UNSURE.

S7: Uncertain.

PI: About whether or not to donate?

S7: Do you mean uncertain about…

PI: Well, unsure…whatever you think unsure means in the context of organ donation.

S7: Uhm..I'm sorry.

PI: No, that's okay. That's completely okay. COMPASSIONATE.

S7: Deserving.

PI: How about ANXIETY?

S7: Nervous.

PI: Okay, RELIGION.

S7: Barriers.

PI: Okay, KNOWLEDGEABLE.

S7: I'm sorry this has to do with like, the whole…

PI: Yeah.

S7: So, I just give a word? I'm sorry I'm just kind of confused about it.

PI: You can give a word or a sentence…you can answer however you want.

S7: Okay…I'm sorry what was the word again?

PI: KNOWLEDGEABLE.

S7: People need to be more knowledgeable about, just the whole organ and tissue donation.

PI: Okay. Do you think that maybe…what would be the benefit if they became more knowledgeable? What do you think that that….

S7: If they became more knowledgeable, I think that there would be a lot more people maybe giving their organs. If they knew a little bit more about it. Because I don't know that much about it, I'm not that knowledgeable about it, so maybe that's why I feel like I am not gonna…

PI: That's why you feel unsure about the whole issue/

S7: Yeah.

PI: Okay. How about DISCUSSION WITH OTHERS?

S7: I feel it's helpful to discuss with others because that way you can get other people's ideas and insights.

PI: Okay, and you kind of said this before…BODY WHOLENESS.

S7: For me, I feel like my body should be kept intact, but there's people out there and obviously organ and tissue donation is a very good thing, so sometimes you have to sacrifice to help others.

PI: And then the last one I have is just GOOD. The word GOOD.

S7: Overall it's good to help people and do what you can to help save a life.

PI: Is there anything else you think of when you think of organ and tissue donation that maybe I didn't cover or that you want to add?

S7: I don't think so.

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Subject # 8 (Male, Nondonor)

PI: The first question is for you to tell me what your thoughts are about organ and tissue donation. Your attitudes, feelings, beliefs about the topic.

S8: I never really thought about it too much, but I think that people are probably scared to do it because it's kind of weird to think of your organs going to somebody else. But, I don't understand why people wouldn't want to do it. I don't really need them.

PI: Okay. So, are you a donor?

S8: No. Not because I don't want to be, just…I never went out of my way to do it.

PI: Okay, so the opportunity never really presented itself.

S8: No.

PI: Okay, now this next part consists of a series of words. I'll say the word and I would like you to tell me what comes to mind when you think about this word in relation to organ donation. The first word is SAVE LIVES.

S8: (Silence)

PI: If you don't have anything to say about a word, nothing comes to mind, just tell me and we'll skip it.

S8: Skip it.

PI: Okay, HELP OTHERS.

S8: I'm supposed to say the first thing that comes to mind, because…

PI: Well, it doesn't have to be a one word answer, it can be an extended answer.

S8: Like organ donation does save lives?

PI: You can say that.

S8: Well, you can say that for all of them.

PI: Well, probably, but whatever it is that you think of when you think about donation.

S8: More people should save lives by donating.

PI: Okay, UNSURE?

S8: I think people are unsure because of the whole idea of your organs being in someone else's body. It's kind of strange.

PI: Okay, how about COMPASSIONATE?

S8: I think it's something that would be very compassionate to do.

PI: Okay, ANXIETY?

S8: I don't think anybody's very anxious to do it.

PI: How about you?

S8: No, I don't really have a preference one way or the other. I would do it, like I said, it's just something that never presented itself. I didn't go out of my way to do it basically.

PI: Okay, RELIGION.

S8: I don't think it's against religious beliefs or anything.

PI: KNOWLEDGEABLE?

S8: Pass.

PI: Okay, DISCUSSION WITH OTHERS.

S8: It's something that's not discussed a lot, like even with school probably should be more often when you're younger and stuff, but it's really not. I very rarely hear about it.

PI: Okay, BODY WHOLENESS.

S8: Pass.

PI: Okay, there's just one more…GOOD.

S8: I think you'd feel good about yourself, well, your family would feel good about what you did. You'd help save someone's life that way. You'd feel good about being a donor, or knowing you're a donor.

PI: Okay, that was all that I have. Was there anything that came to mind that I didn't specifically ask about that maybe you can add or want to add?

S8: Not really.

Subject # 9 (Female, Nondonor)

PI: Okay, first off, just like I said, I'm interested in what you think about organ and tissue donation. So, if you could just tell me, in your own words, your thoughts, feelings, any beliefs you hold about the process or just the topic in general. Your attitudes. Go on as long as you like.

S9: I think it's a very good thing, to be an organ and tissue donor. I, myself, am not yet. I carried around for I don't know how long the agreements that we got last year in a COM class. For some reason never filled it out, never sent it in. I think it's such a great thing when I hear about other people getting a heart or a kidney. But, when I think of myself being dissected, I just…I don't know…brings me a different feeling about my own death and things like that.

PI: So do you think that it's really the thought of thinking about death that maybe is keeping you from.

S9: I think it has a lot to do with what my family will have to deal with once that happens. The thought of how they might feel about me being taken apart and not my whole body being buried altogether.

PI: Okay. In the next part of the interview I'm just going to say a few words or phrases and if you could indicate to me what comes to your mind when you hear those in relation to organ and tissue donation. The first one is SAVE LIVES.

S9: Helpful.

PI: Okay. And, if you feel like you want to go on about one, you have a lot to say about something, that's fine. It doesn't necessarily have to be one word. Just so that you know.

S9: I know there's been…not direct situations where my family's had to deal with an organ donation. But, we've had to deal with probably something close to it, as far as heart problems with my grandfather and things like that. I don't think it was ever really an option for him. But, I think if it was we would have been grateful to whoever did donate.

PI: Okay, the next one is HELP OTHERS.

S9: If there's a possibility to do it, then you should be able to. I don't think anybody should be penalized for their mistakes they've made in life. However, I resent that certain people aren't as good candidates for organ and tissue donation and that's something they have to deal with.

PI: Okay. The next one is UNSURE.

S9: That'd be me. Unsure of how I feel about it. About how others feel about it. How my family would feel about it.

PI: Okay, COMPASSIONATE.

S9: I'd say I'm pretty compassionate and that people who do donate have to have some sort of compassion and understanding of what people go through…that need those organs or tissues.

PI: Okay, ANXIETY.

S9: Probably how people who are waiting for an organ or tissue donation feel. They deal with a lot of anxiety, with the possibility of it not working out.

PI: Is there any on your part about the prospect of becoming a donor?

S9: I guess yes. The fact that I'd change my mind last minute and decide not to do it. But, I think I have…healthwise I have plenty of years to decide that but if something did happen suddenly then it would be too late.

PI: The next one is RELIGION.

S9: I am Christian and there's nothing really, to me, that goes against any of that. I think if anything, that's what we would want to do as a Christian.

PI: The next is KNOWLEDGEABLE.

S9: I'd say I'm sort of knowledgeable about it. I know that there's many things that can be donated. I guess there's still more I could find out though, as far as what parts are reusable.

PI: The next is DISCUSSION WITH OTHERS.

S9: I think I've asked my parents about it…what they've thought about it. And, it's not that they're not open to discussion about it, I don't really remember them going into much detail about how they feel. Same thing with my boyfriend. I don't think I've ever really discussed it with him.

PI: Okay, and not with friends either?

S9: No.

PI: Okay, the next is BODY WHOLENESS.

S9: I guess that has to do with how I feel about after death. About not being complete. And, being buried with only a shell left. That freaks me out, I guess.

PI: Okay, that's maybe one of the big things that's keeping you from signing the card you've been carrying?

S9: Yes. Which is strange, to think that after death…what's the difference? I argue with myself, what's the difference? You're dead anyway.

PI: The last one I have is GOOD.

S9: I think a lot of good comes from tissue and organ donation. Even from the woman that just had the face transplant. It changed her life. People go through so many things and never realize what good can come of it. And, I definitely think there's a lot of good in tissue and organ donation.

PI: That's all that I have, but is there anything else that maybe you think about, other than these words or in addition to these words, that you think about when you think about the topic?

S9: Not that I can think of offhand.

PI: Okay. Thank you very much.

Subject # 10 (Male, Nondonor)

PI: First off, all I want you to do is talk to me about what it is you think about when you think about organ and tissue donation. Do you have any beliefs you hold about it? Any attitudes or feelings that come to mind when you think about it? Just let me know what those are.

S10: I feel that, when it comes to organ and tissue donation, if it's necessary for somebody to live, first of all it should be allowed. I don't think I would necessarily give my organ and tissue, actually be a donor. I know it's on the back of your license, mine isn't filled out. I don't think I would personally do it. I'm not against it however. I believe that if you can save somebody's life then so be it.

PI: So, you said you're not an organ donor. What do you think that is keeping you from deciding to become a donor? What is it that you might have issues with about the whole process?

S10: It's not so much an issue but it's more the way I've grown up….beliefwise…religionwise. Feeling that you should go out of this earth the way you came in. And, you shouldn't have anything changed about you. Even though it could be for the better of somebody else, but you should come in the way you went out.

PI: Okay. Thank you. This next part is a series of words or phrases typically used in relation to organ and tissue donation. If you could just let me know what comes to mind when you think about them regard to the topic. The first one is SAVE LIVES.

S10: Good for the world.

PI: Okay. Also, just so you know, and I'm not trying to influence your answer, but if you have a lot to say about one, that's perfectly fine. It's up to you…the length of your answer. The next one is HELP OTHERS.

S10: If there's a possibility to do it, then you should be able to. I don't think anybody should be penalized for their mistakes they've made in life. However, I resent that certain people aren't as good candidates for organ and tissue donation and that's something they have to deal with.

PI: Okay. How about UNSURE?

S10: When I think of unsure I think of not knowing all the facts about it and not knowing exactly where your organ or where your kidney would go, with what type of person. I think that has a lot to do with it. If you don't know the person. It might make it more likely to get an organ donation if you knew the person.

PI: How about COMPASSIONATE?

S10: I think the type of person, when you say compassionate, you have to be the type of person who's willing to give and they have to be the type of person who's willing to receive such a give that you're helping them stay alive or for some means they need your organ or your tissue donation. So, it's the type of person that you are that would give.

PI: How about ANXIETY?

S10: Well, I think anyone who would be an organ or tissue donor would be anxious because you're taking something out of your body and you're putting into somebody else. On the other hand, you never know if it's going to be a complete match or if something can go wrong. And, if something goes wrong then you've lost one of your organs or one of your tissues meanwhile it's going to no good because it didn't match.

PI: And, RELIGION?

S10: Religion has a lot to do with it. Like I said, if you believe that you're supposed to go out of this earth the way you came into it, that has a lot to do with it. I think there's certain circumstances that, depending on how religious

somebody is, you can…not really bend the rules…but maybe you can make modifications.

PI: Okay, the next one is KNOWLEDGEABLE.

S10: I think for somebody who's going to be a donor or somebody who's receiving the donation, you have to have some sort of knowledge as to what it exactly entails. Whether it's gonna be a recovery time, or you have to wait in the hospital, or you have to be meeting this person who gave, or if they're gonna want to know who it was. And you have to have some sort of background about what you're doing because if not then you can run into a problem. If you give a kidney and then you need a kidney, that's good and well, but what if you need two. You have to realize you just gave one up I may get an infection or I may not be able to fight something off if I only had one.

PI: Okay, the next is DISCUSSION WITH OTHERS.

S10: You have to be able to talk about the whole process with other people, knowing that this is a big thing. This is not just a walk in the park or you going to buy a candybar, or something like that. It's more of you're giving a gift of life and they're receiving a gift of life. And, you have to be able to talk about it because sometimes your family members may not agree with you or your friends may not agree with you but this is how you wholeheartedly feel then you should make them understand.

PI: Okay, the next is BODY WHOLENESS.

S10: I don't really know. When you say body wholeness the only thing that I can think of is your entire frame that you came in with and exactly what you're doing with your organ. It's your body part. It's not really in my mind becoming a whole person, giving away something, it's more of just becoming a good person in life.

PI: I have one more. It's GOOD.

S10: It's good for the recipient. It will make you feel good. However there are the negatives. Like I said, if you need two organs and only have one…you'll have one kidney or you'll have one lung instead of two, then…you could run into an issue. But, otherwise, it's good for everybody.

PI: Okay. That's all that I have. But, are there any other concepts or ideas that come to mind when you think about it?

S10: Not really. The only thing I could possibly think of is when you hear the word organ and tissue donation, I don't think people really understand what they're doing sometimes. Because, at least for me, I've heard that word, organ and tissue donation, because I've taken health classes in high school and biomedical

issues, and stuff like that. But for some people, not that they're sheltered, but the first time they see something about organ and tissue donation it's on the back of their driver's license. They have to check off the box, and if they don't know about that then obviously they're not going to. I think awareness…people definitely have to become more aware about the whole process and what it entails way before you're an adult. This way, hopefully, you don't know somebody or you don't end up with needs that…but like if you do, at least you know what can come out of it.

PI: Okay. Thank you.

Subject # 11 (Male, Nondonor)

PI: First off, all I want you to do is talk to me about what it is you think about when you think about organ and tissue donation. Do you have any beliefs you hold about it? Any attitudes or feelings that come to mind when you think about it? Just let me know what those are.

S11: I believe it's a good thing. I told my parents that if anything ever does happen to me that I would…you know, organ and tissue donation definitely.

PI: Okay. So, are you currently a donor? Are you a registered donor?

S11: No.

PI: What do you think is keeping you from registering as a donor?

S11: I'm just kind of lazy I guess.

PI: So, the opportunity really hasn't been put in front of you?

S11: Yeah. That's kind of what it is, yeah.

PI: Okay. For this next part, all I'm going to do is say a series of phrases or words that are used in association with organ donation. And, if you could tell me what first comes to mind when you think about them in regard to the topic. Okay?

S11: Okay.

PI: The first one is SAVE LIVES.

S11: Doctors and nurses, and stuff like that.

PI: Okay. And, just so that you know, you're free to answer any way you choose. So, if you want to expound on one that's fine, or if you have only one or a couple

of words to say that's fine too. Or, if you have nothing say, you can just tell me to move on to the next one.

S11: Okay.

PI: The next is HELP OTHERS.

S11: You can do that by organ and tissue donation.

PI: And, UNSURE.

S11: A lot of people probably feel unsure about that, organ and tissue donation.

PI: Okay, COMPASSIONATE.

S11: Definitely, if you do it, you're compassionate. I would say.

PI: Okay, ANXIETY.

S11: I think family feels that, you know…parents if you were going through with organ and tissue donation. The family would feel anxiety about whether to go through with it or not.

PI: Okay, RELIGION.

S11: How certain religions might look upon it.

PI: KNOWLEDGEABLE

S11: It's better to be knowledgeable about something before you just go and do it.

PI: DISCUSSION WITH OTHERS.

S11: You definiately should have it because if you don't tell anybody you're going to be an organ donor, if nobody knows then…you can't donate them. It's up to them.

PI: Okay, BODY WHOLENESS.

S11: No answer on that one.

PI: Okay. I have one more and it's GOOD.

S11: It's a good thing to do, I guess.

PI: That's all that I have, but is there anything else that you think, any concepts or phrases, anything else that comes to mind that we haven't talked about?

S11: No.

PI: Okay, that's all. Thank you.

Subject # 12 (Female, Nondonor)

PI: First off, all I want you to do is talk to me about what it is you think about when you think about organ and tissue donation. Do you have any beliefs you hold about it? Any attitudes or feelings that come to mind when you think about it? Just let me know what those are.

S12: My dad's a doctor, so I know a little bit about it. He described it to me as, like, you get into a car accident…and you die, if somebody needs your cornea. It would be that. I don't really think there's anything wrong with it because people have regular organ transplants.

PI: Okay. So, are you currently a donor? I'm assuming not…

S12: Yeah…it's like on the back of your license or something?

PI: That's one way you can do it; you can also go online. There are a couple of places you can go to register to become a donor online. Just indicating your intent to.

S12: Yeah…I wouldn't be against it.

PI: Okay. What do you think has kept you from doing that?

S12: I didn't know about it.

PI: Okay.

S12: So, in the next part I'm just going to ask you a number of phrases or words that are commonly used in regard to organ and tissue donation. And, if you could just tell me what comes to mind when you think about them. The first one is SAVE LIVES.

S12: I agree. It's, like, a good thing.

PI: Okay. The second is HELP OTHERS.

S12: I would want to help others. I don't understand why people are against it.

PI: Okay. The next is UNSURE.

S12: I don't see why people are so unsure about it. If they want to save a life, it's the best way they can. You're not going to use them (the organs).

PI: Okay. The next one is COMPASSIONATE.

S12: I think people who do it show a lot of compassion, or their families if they agree. I know it takes probably a lot; I know it's hard to let go.

PI: Okay, and ANXIETY.

S12: I think it's probably more anxiety for family members. If they're in that situation, where a person, their loved one is dead and wanted to do this. It would cause anxiety for them because they really don't have control over it.

PI: Okay, and RELIGION.

S12: I'm not very religious. I don't know, but I guess, from what I've heard, that, depending what religion you are, you'd be against it or for it. I don't know about religion that much.

PI: Okay. The next is KNOWLEDGEABLE.

S12: Probably the more knowledge you have about it, the more willing you would be to do it. Or, the more likely you wouldn't be against that.

PI: Okay. DISCUSSION WITH OTHERS.

S12: By discussing with others you'd have more information about it. I'm sure you'd get more insight towards it.

PI: BODY WHOLENESS.

S12: I think that's silly. I don't really think you're, if you die…If you donate your cornea to someone, I don't think you're less of a person being buried. You're just helping someone.

PI: Okay, and the last one is GOOD.

S12: It's definitely a good thing to do. You're extending someone's life…helping them out by doing it. So,…

PI: Okay. That's all that I have. But, before we end, are there any other that you think should be included? Or, anything else that comes to your mind when thinking about the whole topic?

S12: I definitely think that it should be more spoken about. Because…I read the newspaper, and I've read about stem cell research. It's kind of the same thing, right? Or, no?

PI: It is because mothers choose to donate fetal tissue. In that respect, it is. But there are other kinds…you can be a living donor and, say, give one of your kidneys or a piece of your liver to somebody. But, mostly, what is thought of with donating is cadaveric, so you're brain dead.

S12: I didn't realize you could actually be a living organ and tissue donor. I didn't realize that; I thought you had to be dead. With the grim example my dad gave me.

PI: No. There are some instances where…for children with diabetes or who have kidney failure, a lot of times their parents will donate one of their kidneys. That's one example of a living donor.

S12: Okay. I just think people need to talk about it more because I didn't really know a lot about it. I keep track of things, I read the paper everyday, and I talk to my dad about stuff like political issues and what I've seen. I really did not know a lot about it. That's why I'm glad I did this.

Subject # 13 (Female, Nondonor)

PI: First off, all I want you to do is talk to me about what it is you think about when you think about organ and tissue donation. Do you have any beliefs you hold about it? Any attitudes or feelings that come to mind when you think about it? Just let me know what those are.

S13: I think it's, I mean I'm not signed up as an organ donor, I've kind of held to the notion, which probably most times isn't true, that if you get in an accident or say something does happen, if you are marked as an organ donor, they…I don't know where I get the idea, they might not do as much to save your life if they know you're a donor. Because there might be someone that really needs your organs, so maybe they'll do it, but maybe they won't be so apt to do everything they can. That's mostly what I know about it, that you can donate anything…bone marrow…

PI: Okay. In the next part, I'm just going to say a series of words or phrases that are oftentimes used in reference to organ and tissue donation or are associated to the topic. What I would like for you to do is, when I say them, if you could just tell me what it is you think about when you hear that in regard to the topic of organ and tissue donation. And, just like before, you're free to answer as in depthly as you like. If it's just a word or two, that's fine, but if you want to expound on them feel free to do so. The first one is SAVE LIVES.

S13: I think it's a good thing, obviously, in regards to that. I know…organ and tissue donation, in reference to saving lives?

PI: Yeah. What does that phrase conjure up in regard to organ and tissue donation?

S13: It's a good thing…heart transplant…kidney transplant. If someone, even I know if I wasn't going to make it or if I did want to live at a certain life. I mean if I couldn't live like I am now, I would rather have someone that was either younger than me or that needed something more, so that they could live their life. So, I mean, I think it's a good thing.

PI: The next one is HELP OTHERS.

S13: I think it does, it can help others. But I also think that it doesn't always. Special circumstances…you never know if it's going to take or if it's not. So, I can see that it does help others. But in a lot of cases it's pretty risky, especially I noticed more with kidney transplants.

PI: The next is UNSURE.

S13: I don't think I would ever be an organ donor and I wouldn't sign up as one unless I put it in a proxy or something. If I'm DNR, or something like that, then I would, but not before then.

PI: Is it because you're unsure of them doing all that they can for you? What exactly is it that you're unsure of? Because this seemed to come up with this word.

S13: I would probably want the best care possible before they would approach family and say, "Hey you know, listen, this and this chance but she is an organ donor and we have these people on this waiting list for a long time and what do you want to do?" Well, I'd say, well, then again if it was the quality of life or state I was in…I don't even think I would want to debate. I wouldn't care if they took them right then and they didn't do everything. So, it would really depend on the quality of life I would have and the outcome of an event or circumstance. But, I don't know if I would sign up beforehand, nor would I want my fiancé to sign up as an organ donor.

PI: Okay. The next one is COMPASSIONATE.

S13: It's hard…I can be compassionate for people that are on waiting lists and it's really…it's a bad thing or a weird situation, but I think no matter how compassionate I was, I don't know if that would make me want to go through a certain thing. When it's family I think there'd be no doubt about it. If I had a match

of a kidney or someone needed something, blood, or something like that. But, when I, or if it was for a child – no matter what – but other than that, I don't know. But, nor would I want anybody else's organs in me. No way.

PI: So, is that where being unsure comes in?

S13: I just believe that, especially with a heart or anything like that, I honestly feel that it's not just an organ. I know how they say that your brain controls these factors and everything, but I'm not really so sure about that. And, I don't think I would want a stranger's, anything of a stranger's. I think it's…even their eyes…that would be really…it's kind of different; you don't really know when they connect the nerves back to your brain and if that is possible that you can see out of it. I mean, you don't know who that person was or anything. I just think it's…if that's what someone else would want fine, but I wouldn't want it.

PI: The next one is ANXIETY.

S13: I think the only anxiety I would ever have over it, if someone in my family needed bone marrow or a kidney or you never know if they get leukemia or something like that. The only anxiety I would ever have would be to go through a painful procedure, and not, and still have horrible repercussions for them. Like it wouldn't work or it wouldn't take or something like that. To put another person through that procedure, and myself, for no benefit for them. That would be the only anxiety I would feel.

PI: Okay. The next one is RELIGION.

S13: That one's really tricky. I was raised Catholic and my fiance's Hindu, so it's really different backgrounds. But, being Roman Catholic, you're supposed to die and to technically be buried with everything that God gave you when you were born. So, really doing that, as far as a good thing, and to save someone else is also…if you're not whole when you die, you don't rise whole and when He returns. So, you can't be cremated. It's just very bizarre things. I've never donated blood in my life, and I never will. I won't donate blood unless it's for myself for an operation. I'm just worried about…I wouldn't want anyone else's anything in my…because I don't know who they are or where they come from. I think that's how I grew up, my family's always been like that. Unless it's for family, then you really shouldn't because you don't know the type of person or who they are.

PI: The next one is KNOWLEDGEABLE.

S13: I think it's great what they can even do now with anything…transplants. They can even look at…not just with human, but with animal. If they can save more lives…it seems to be really, really hard for people who need, not just heart transplants, but maybe liver. There's certain things that are incredibly hard;

there's people on dialysis for years. It'd be nice to have a lot more research and to…other things that maybe can happen or so people don't have to wait as long to get something that they need or maybe find another way to go about it.

PI: Okay, the next is DISCUSSION WITH OTHERS.

S13: I've never really discussed anything other than a DNR. But, I have a couple of friends who, on their license it says that they're organ donors. I know people who are gung-ho on it. I'm more…I'd rather do more stem cell research, tissue research, stuff like that. Other then that it's not really discussed.

PI: I just have two more, the first is BODY WHOLENESS.

S13: I wouldn't incomplete if it was a kidney and I was still alive and I did it for somebody…even if it's a teenager. I wouldn't feel incomplete or something, but I would be curious, I'd want to know if they were okay or how it was affecting their lives. But, I don't think it would make me feel any different.

PI: Okay. And, the last one is GOOD.

S13: I think that's what's come out of a lot of it...a lot of good. I think for a lot of families and a lot of people who have been given a second chance. It can be a good idea.

PI: Okay. That's all that I have, but is there anything that I haven't brought up that you think about when you think about organ and tissue donation?

S13: I don't think so.

PI: Okay. Thank you very much.

Thursday February 16, 2006

Subject # 14 (Male, Nondonor)

PI: First off, all I want you to do is talk to me about what it is you think about when you think about organ and tissue donation. Do you have any beliefs you hold about it? Any attitudes or feelings that come to mind when you think about it? Just let me know what those are.

S14: Well, I don't really have that big of an opinion about organ and tissue donation. I wouldn't have any problems with donating my organs after I pass away. I know that on the back of the license you can donate your organs or whatever you want. But, I really don't have any problem with it; I know some people do, I don't. I'm not going to use them, I might as well help somebody else out.

PI: Okay. So, are you currently a donor? Have you signed a donor card?

S14: No, I haven't signed it. I probably should do that. But, I have kind of mixed feelings on it. I go back and forth a little bit.

PI: What do you think it is that might be keeping you from signing?

S14: Well, part of me is saying that I don't want to go through with…I'm probably going to need it. And, God forbid, if I should lose it, maybe somebody in my family might need to use it and they might not get it. There also could be problems with, I know there could be something in my kidneys that could cause a disease in somebody else. At least that's what I've heard. I don't know if that's true.

PI: I think they do all sorts of testing first.

S14: I guess, also, it's just thinking about losing my organs is a depressing feeling.

PI: Okay. That was the first part. In the next part, I'm just going to say a series of words or phrases that are oftentimes used in reference to organ and tissue donation or are associated to the topic. What I would like for you to do is, when I say them, if you could just tell me what it is you think about when you hear that in regard to the topic of organ and tissue donation. And, just like before, you're free to answer as in depthly as you like. If it's just a word or two, that's fine, but if you want to expound on them feel free to do so. The first one is SAVE LIVES.

S14: I think that's part of what organ and tissue donation is for. It's a great thing to be able to donate your organs to somebody, but I don't know if a lot of people actually go through…everybody will say, "I'm in favor of it," but they don't actually follow through with it. You know, take the necessary steps to make the process go through.

PI: Do you think it's because of the thought of losing an organ? Like what you said?

S14: It could be. I guess people don't want to come to the realization that they are going to die one day, and they don't want to think about what's going to happen to their bodies. A lot of people believe that my body's pure, my body's mine and why should anybody else get it? I believe if anybody can help anybody out, it's just the better thing to do.

PI: The next one is HELP OTHERS.

S14: I think…do you want me to tell you what I feel about it?

PI: Yes.

S14: I think it does help others. I don't think there's enough organ and tissue donation; I don't think many people realize it's a problem, much like the blood shortage. I don't think people want to come to the realization that there are problems going on outside of just the United States that people actually need organ donations.

PI: Okay. The next on is UNSURE.

S14: A lot of people are unsure about it, I guess for the same reasons I've said before that they're not really sure of what goes into the whole process and how everything…and how organs are taken from your body and I guess if people were more aware of that process they might be more comfortable.

PI: Okay, the next is COMPASSIONATE.

S14: I think some people are compassionate, some people aren't compassionate. It depends on how committed you are to other people. How knowledgeable you are of organ and tissue donation. I'm not really…they don't really teach you any of this, unless you actually want to learn about. You have to do it on your own.

PI: The next one is ANXIETY.

S14: I think it makes people anxious to think about organ and tissue donation because they're not really sure what goes into it; they don't want to think that they only have a certain amount of time to live on the earth and that causes a lot of anxiety.

PI: Okay. Then next one I have is RELIGION.

S14: I know there are different perspectives to religion and how different religions take into account organ and tissue donation. But, I think a lot of times you have to look past that because it's a matter of helping other people out regardless of your religious beliefs.

PI: How about KNOWLEDGEABLE?

S14: Well, like I said, I don't think there are a lot of people who are that knowledgeable on the subject. You rarely hear about it; you hear commercials for AIDS. I don't know if there are that many organ and tissue donation awareness days. Is there an organ and tissue awareness day?

PI: There's actually a month…the month of April.

S14: A month. There's a month for everything, though…so. I don't think enough people have enough knowledge on the subject. It has to be publicized that there is more of a problem. There has to be more testmonies from different types of people. If a celebrity talked about it; people tend to believe celebrities and spokespeople about the subject. That would help.

PI: Okay, how about DISCUSSION WITH OTHERS?

S14: I think it's very important to discuss it with others. I don't really discuss it with anybody other than you maybe plus family. I think it's very important to get the idea out that it should be the thing you should be doing – organ donation. Then you kind of hesitate to discuss it with somebody because it is kind of a sensitive issue. I mean it goes back to the whole religion thing. You don't want to invade someone's privacy because it's kind of private.

PI: So, have you had a conversation with your parents or your family about it?

S14: Briefly, but not recently. Like I said, I'm one of the people that doesn't really want to face the fact that I do have to decide what I want to do with my body. It's not really that pleasant of a thought so…The whole 9/11 thing should have opened up everybody's mind to the fact that everybody needs other people's help. We have to be unified, I guess.

PI: The next one is BODY WHOLENESS.

S14: In terms of what?

PI: The concept of keeping all of the body parts together.

S14: I think that's, I don't really agree with body wholeness. Like I said, any way you can help somebody else out…you're not going to be using it so you might as well try to help somebody else out. Even though it's only going to extend their life a certain amount of time, it's still worth it. It's just something you can do to help out humanity.

PI: Okay. I just have one more and it's GOOD.

S14: I don't really know what to say about good. It doesn't really bring to my mind a good thought, organ and tissue donation, but it should be a good thought. It should start changing and people should be more aware of what's going on.

PI: That's all I have, but are there any other terms or phrases that come to mind when you think about it, that maybe you can add to my list?

S14: Knowledgeable is a really good one. Public promotion…I guess awareness.

Subject # 15 (Male, Donor)

PI: First off, all I want you to do is talk to me about what it is you think about when you think about organ and tissue donation. Do you have any beliefs you hold about it? Any attitudes or feelings that come to mind when you think about it? Just let me know what those are.

S15: I'm perfectly okay with organ and tissue donation. I think it's a good thing.

PI: Okay. So, have you signed an organ donor card?

S15: I believe I did when I did my driver's license I signed. I agreed to have my organs donated.

PI: Was there anything in particular that pushed you in the direction of signing?

S15: I just think it's selfish not to give it out. You're not going to use it anymore. The only thing I'm a little wary about was…if you get hurt in an ambulance and somebody wants it they might not give you the care that you might need because someone might need that.

PI: That's a common concern among people.

S15: It's not too big of a concern, but I always wondered about that.

PI: Actually, a lot of people express that as a reason why they have reservations about becoming a donor and really if anything were to happen to you if you had an accident the EMTs who were there to help you wouldn't look through your wallet to see if you were a donor first. They would have no knowledge of that. Their first concern is for your safety and trying to help you.

S15: Alright.

PI: Okay. That was the first part. In the next part, I'm just going to say a series of words or phrases that are oftentimes used in reference to organ and tissue donation or are associated to the topic. What I would like for you to do is, when I say them, if you could just tell me what it is you think about when you hear that in regard to the topic of organ and tissue donation. And, just like before, you're free to answer as in depthly as you like. If it's just a word or two, that's fine, but if you want to expound on them feel free to do so. The first one is SAVE LIVES.

S15: I believe that they do save lives. And, it's a good thing.

PI: The second is HELPS OTHERS.

S15: Again, it helps others…save lives.

PI: Okay, how about UNSURE?

S15: No, I'm pretty sure that it's a good thing and that everyone should donate.

PI: COMPASSIONATE?

S15: Yeah, you're showing compassion by donating your organs.

PI: ANXIETY?

S15: No, I don't feel any anxiety about donating. It doesn't really bother me.

PI: Okay, how about RELIGION?

S15: No, I don't think it goes against any religious values.

PI: KNOWLEDGEABLE?

S15: I'm not extremely educated in the field. I just know that it's the right thing to do since you're not gonna be using them.

PI: How about DISCUSSION WITH OTHERS?

S15: I don't recall a specific time I had a discussion with other people about organ donation besides when I was at the DMV, but I…I don't remember discussing it with other people.

PI: How about BODY WHOLENESS?

S15: What do you mean by body wholeness?

PI: The idea of keeping all of you body parts together.

S15: Alright…I think that's ridiculous. You're not going to use it and they're going to be decomposed anyway after a certain amount of time so it's not even a part of your body. So, you might as well give them away.

PI: Okay, I just have one more and it's GOOD.

S15: Yes, it's a good thing. I think it's more of a duty than a good thing and you should do it.

PI: Okay, that's all that I have, but when you think about it are there any other words or phrases that come to mind that I didn't cover?

S15: Yeah, I think it's a duty. I think that everybody should have to do it. I think it's selfish not to do it. Besides that it's about it.

Subject # 16 (Male, Nondonor)

PI: First off, all I want you to do is talk to me about what it is you think about when you think about organ and tissue donation. Do you have any beliefs you hold about it? Any attitudes or feelings that come to mind when you think about it? Just let me know what those are.

S16: Basically, I think that organ and tissue donation is something that's very important, but it's not done to the extent it should be. I think a lot of people, when you confront them with that issue and say, "Can you sign this or go to this…?," they kind of want to sensor it. That's the way I see it. Me, personally, I think it's a good thing, but I haven't gotten up myself and said well let me. But for me it's a little more personal because I have family members who have needed certain things and haven't gotten any so I see it as in well what's the point if it's not going to benefit me?

PI: So, do you think that is the only thing that is keeping you from it?

S16: No, maybe because I'm not that much aware of it. It hit home, but the fact that I never seen it actually seen it work doesn't allow me to…because I've never really spoken to anybody who has been a recipient of anything like that so maybe me being aware of it, going to a meeting or something would help. But, the fact that, in my situation there's never been anything good happening. I guess it's not something I'm trying to focus on right now.

PI: Okay. That was the first part. In the next part, I'm just going to say a series of words or phrases that are oftentimes used in reference to organ and tissue donation or are associated to the topic. What I would like for you to do is, when I say them, if you could just tell me what it is you think about when you hear that in regard to the topic of organ and tissue donation. And, just like before, you're free to answer as in depthly as you like. If it's just a word or two, that's fine, but if you want to expound on them feel free to do so. The first one is SAVE LIVES.

S16: Not thought of enough.

PI: HELP OTHERS?

S16: Mainly on a superficiall status. A lot of people just say they will do what they need to do to help others, but when it really comes down to it not many are going to stand up to that cause.

PI: How about COMPASSIONATE.

S16: I think it's a bunch of b.s. Really consisting of the same reasons, a lot of people say they're compassionate, they say they feel compassion but they don't act out what they feel.

PI: Okay, how about UNSURE?

S16: That's what I am. A lot of people are when it comes to organ and tissue donation because they really don't know the facts and some, like myself, don't take the time out to actually learn it, which is a shame.

PI: Okay, the next is ANXIETY.

S16: I think that it comes with that kind of territory. It's like uncertainty, stuff like that. People don't know what to expect so, even curiosity. I think it just ties down to everything. It's something big, so you have to either be sure about it or don't even get into it at all.

PI: Okay, the next one's RELIGION.

S16: I believe in a higher power and I honestly just think that if you believe in something you should let it be. Some people say that if you donate organs or stuff like that then you're doing somebody else's job. If you can help, and you are willing, it's great. But, in terms of me, I believe that things happen for a reason and if you're not meant to live, then, God forgive me, you're not meant to live.

PI: Okay, the next one is KNOWLEDGEABLE.

S16: Too few. A lot of people are at the willingness to participate, but in terms of knowledge people don't have enough of it I don't think.

PI: How about DISCUSSION WITH OTHERS?

S16: It never happens. I think people just run away from it. People might be asked, "Would you do this, would you do that?," people just brush it off or it's not that serious or it's not that important. I think discussion with others, if it's peer to peer, it doesn't happen. If it's subordinate to somebody, it's more important when it comes from a higher person to a lower person.

PI: Have you ever had any discussions about organ and tissue donation?

S16: No. I've heard about it, but I've never had interactions with people who actually deal with it, like they speak on it.

PI: Okay, how about BODY WHOLENESS?

S16: Body what?

PI: BODY WHOLENESS. The idea of keeping the body intact, in one piece.

P16: In terms of funeral situations?

PI: It can be, or some religions believe in reincarnation so that might come into play for you. Whatever you think of when you think of the idea of body wholeness.

S16: You're dead. It's a sad thing to say, but you're dead. Your organs, you wouldn't be able to tell if they're gone or not. It's an ify subject, but if it can help somebody, if it can save somebody else's life then…they say with death comes new life so, what better example than that.

PI: Okay, I just have one more…it's the word GOOD.

S16: I don't think that's the right word to use for organ and tissue donation; it should be great, but good is good enough. I think a lot of people might think that they're doing good, even taking the time to listen to people or just sign up for something.

PI: Okay, that is all that I have, but in talking about it are there any other words or phrases that you might want to add to what I've brought up?

S16: No, I'm sorry.

PI: No, that's fine. Thank you for coming in.

Subject # 17 (Male, Nondonor)

PI: First off, all I want you to do is talk to me about what it is you think about when you think about organ and tissue donation. Do you have any beliefs you hold about it? Any attitudes or feelings that come to mind when you think about it? Just let me know what those are.

S17: I have no beliefs on it. Just that I think it's a dead body and it would be more for a human cause to give to other people who are in need. Other than skin, I would like to have some skin on my when I get buried. I would like to have an open casket. But with my organs, if they're working, I would like to help someone else.

PI: Okay, so are you currently an organ donor?

S17: No.

PI: Is there is anything that has kept you from donating? You sound like you're positive about it.

S17: Not that I've had a chance to do it, I just it doesn't come to mind. I know some people last year were talking about it, but I wasn't really focused then about it. But, they gave me a card and I…

PI: So, it's maybe that the opportunity really hasn't…

S17: …arisen.

PI: Okay. In the next part of the interview, I'm just going to say a series of words or phrases that are oftentimes used in reference to organ and tissue donation or are associated to the topic. What I would like for you to do is, when I say them, if you could just tell me what it is you think about when you hear that in regard to the topic of organ and tissue donation. And, just like before, you're free to answer as in depthly as you like. If it's just a word or two, that's fine, but if you want to expound on them feel free to do so. The first one is SAVE LIVES.

S17: It's the number one priority. If I can help somebody, if it's family or friends it would be great, if it's a stranger, same thing. A life is a life.

PI: The second one is HELP OTHERS.

S17: Same thing. To save a life is the best thing.

PI: How about UNSURE?

S17: Other than if my organs don't work, don't take them out.

PI: Okay, COMPASSIONATE?

S17: It shows that even after you're dead you want to help others. I gives you some credit.

PI: How about ANXIETY?

S17: Nothing…

PI: Okay, RELIGION.

S17: I believe in religion, but I don't follow it that much and I don't know if the Catholic church does. But, I would do it just because it's me.

PI: Okay, KNOWLEDGEABLE?

S17: Like I said, if it helps another person to live, I know it would help and I know if I needed something if somebody would give it to me, I would definitely take it to live. So I would like to give that gift to somebody else.

PI: Okay, how about DISCUSSION WITH OTHERS?

S17: You don't really discuss it. It's not that it's taboo. It just never came up in conversation, "Hey, if you die can I get your eyes, or liver, or something?"

PI: Have you discussed anything with your family about your being an organ donor?

S17: No, not yet. I have spoken to my mother about her, but about myself not yet, although I should.

PI: How about BODY WHOLENESS?

S17: Unless my body is mutilated in my death, I never thought about that.

PI: I just have one more, it's the word GOOD.

S17: Good is just a feeling. It's better a feeling that you saved others. No word can express what you show when you save someone's life.

PI: That's all that I have, but when you think about it are there any other words or phrases that come to mind?

S17: Thoughtless. That's it.

PI: Okay, thank you for coming in and being so open.

Subject # 18 (Male, Nondonor)

PI: First off, all I want you to do is talk to me about what it is you think about when you think about organ and tissue donation. Do you have any beliefs you hold about it? Any attitudes or feelings that come to mind when you think about it? Just let me know what those are.

S18: To be honest, I don't really know that much about it. But, what I do know about it, I'm for it because if you have a chance to help somebody else who's in worse shape than you, then why not? I just don't see why it's a bad idea.

PI: Okay. So, are currently a registered organ donor?

S18: No. I don't think, no

PI: Well, you would either go online or register at the DMV.

S18: Then, no, I haven't registered. But, if I knew about it, I would.

PI: So, do you think that is the only thing that has kept you from becoming an organ donor?

S18: It's just the lack of…how to go about it…lack of information.

PI: Okay. That was the first part. In the next part, I'm just going to say a series of words or phrases that are oftentimes used in reference to organ and tissue donation or are associated to the topic. What I would like for you to do is, when I say them, if you could just tell me what it is you think about when you hear that in regard to the topic of organ and tissue donation. And, just like before, you're free to answer as in depthly as you like. If it's just a word or two, that's fine, but if you want to expound on them feel free to do so. The first one is SAVE LIVES.

S18: What comes to mind when I think about that?

PI: Yeah…in regard to organ and tissue donation.

S18: I'm sure it does save a lot of lives.

PI: How about HELP OTHERS?

S18: Same ballpark as the last one. I think it plays a huge role in helping others. Oftentimes, it helps others in ways they can't do with surgery.

PI: Okay. And, UNSURE.

S18: I don't know, nothing comes to mind.

PI: Okay, how about COMPASSIONATE?

S18: I'd say donating your organs, even if you are deceased, shows compassion for donation, care about other people.

PI: And, what about ANXIETY?

S18: Maybe there's some anxiety about, like if I'm donating my organs, will this actually work? There's probably a lot of stress involved for especially the family. If I had a family member I'd say, "Well, why are going to cut up so-and-so just so that, this may not work?"

PI: The next one's RELIGION.

S18: Again, I don't know much about donation, but I'm sure there's a lot of religious beliefs that may hold back someone from a particular religion from donating. I don't know anything about it…

PI: So, it may be a barrier to donation?

S18: Perhaps. If it's part of the religious culture for some reason or another.

PI: Okay, the next is KNOWLEDGEABLE.

S18: Like I said, I didn't know anything about how to sign up, so I think that knowledge is probably, just like with a lot of other things…diseases, AIDS, the more knowledge, the better the turn out would be for all of organ donation.

PI: And, DISCUSSION WITH OTHERS.

18: Maybe, I guess, when I think about that, I guess talk to your family, while you're living, about what their thoughts are. I'd probably talk to my parents and say, " what do you guys think about it, should I be an organ donor, would you approve?"

PI: Have you had that conversation?

S18: I haven't.

PI: No, okay. What about BODY WHOLENESS?

S18: No comment. I don't know what that means.

PI: It's the thought of keeping all of the body parts together, not separating them.

S18: I'm for organ donation. So, I don't think that really matters to me.

PI: I just have one more…the word GOOD.

S18: I think organ donation is good; I think it's helpful.

PI: I don't have any more, but in thinking about all of these and of the topic, can you think of anything else that should be added to this list or anything that we haven't covered that…

S18: These words?

PI: Well, yeah, either these words or just in general – something we haven't covered that you think is an important part of the process?

S18: Well, now I'm interested to know what are some of the setbacks to organ donation? I don't know if that's applicable to your study or not, but I know we were talking about religion, I would want to know what some of the religious setbacks are. Why isn't it happening…

PI: So, just more knowledge..?

S18: Yeah.

PI: Okay, just to answer your question, most religions support it. There are very few that have more strict policies or beliefs. I think it's the Jewish Orthodox faith, that you can't even have tattoos. So doing anything to the body is taboo including organ donation. But, there aren't very many like that, most find organ donation to be a good thing. If you would like more information about it, there is a lot of information online about organ donation; you can find lots of stuff.

Subject # 19 (Female, Nondonor)

PI: First off, all I want you to do is talk to me about what it is you think about when you think about organ and tissue donation. Do you have any beliefs you hold about it? Any attitudes or feelings that come to mind when you think about it? Just let me know what those are.

S19: I do believe in organ and tissue donation. I think more people should do it. I don't have it on my license yet, but I have talked to people about it and I know that I do want to be an organ donor. I don't think I've talked to anyone about the extent to which I'd be willing to donate, but I definitely do believe in it.

PI: Okay, so, you intend to become an organ donor?

S19: Yes.

PI: Is there anything in particular that has inhibited you from becoming an organ donor?

S19: You mean like register for it?

PI: Yes.

S19: I just haven't gotten around to it. I've let family members know that I do want to be an organ donor.

PI: Okay. That was the first part. In the next part, I'm just going to say a series of words or phrases that are oftentimes used in reference to organ and tissue donation or are associated to the topic. What I would like for you to do is, when I say them, if you could just tell me what it is you think about when you hear that in

regard to the topic of organ and tissue donation. And, just like before, you're free to answer as in depthly as you like. If it's just a word or two, that's fine, but if you want to expound on them feel free to do so. The first one is SAVE LIVES.

S19: I know that it can save up to 50 or 52 lives if you're a full organ donor. That's really all I know about it.

PI: Okay, how about HELP OTHERS?

S19: It would be helping others by saving lives and helping other families cope with not losing a loved one.

PI: Right,,,what about the term UNSURE?

S19: There's always gonna be people who are unsure about whether or not this is what they want to do, but in the long run when they do look at the A side and the B side, they're gonna realize that donating is definitely the right thing to do.

PI: The next one I have is COMPASSIONATE.

S19: Skip.

PI: Okay, that's fine. How about ANXIETY?

S19: Well, I think it could be nerve racking for the family that would be donating. I really don't think there is any…I guess they're anxious to receive.

PI: How about RELIGION?

S19: I personally don't have any religious beliefs when it comes to organ donation. It's just something I want to do. I'm there's religions who are completely against it and some that are completely for it, but I don't really think about it.

PI: Okay, and how about KNOWLEDGEABLE?

S19: I don't think there are enough people who are knowledgeable enough to donate. If they don't know what they can do, the benefits – there really aren't any cons to it, at least in my opinion.

PI: The next is DISCUSSION WITH OTHERS.

S19: Other than discussing it with everyone else, letting people know that that's what you want, and eventually registering in New York State, if you're still here.

PI: Okay, BODY WHOLENESS.

S19: No clue.

PI: Okay, I just have one more; it's the word GOOD.

S19: It's good to donate.

PI: Okay, that was all that I had, but in going through these, is there anything else you think should be added to this list or anything that comes to mind that we didn't bring up that you would like to share?

S19: Some words, I would think maybe, helpful or beneficial.

PI: Okay, thank you.

Subject #20 (Female, Donor)

PI: First off, all I want you to do is talk to me about what it is you think about when you think about organ and tissue donation. Do you have any beliefs you hold about it? Any attitudes or feelings that come to mind when you think about it? Just let me know what those are.

S20: I think it's a really good thing. I actually, last year, I don't know for what class it was for, but I had people come in and talk about it, and me and all of my friends signed up, officially, for it, because they were saying sometimes if you just sign on the back of your license sometimes it's not or whatever. So, I did the whole thing and I even told my mom; she was like, "I don't want to talk about it." I'm like, " Well, just so you know." I think, what good is it going to do me when I'm dead? I just think if I give all my organs it could help someone out.

PI: So, was that your main reason for deciding to be a donor? To be able to help other people?

S20: Yeah, because I don't really see why people wouldn't want to. It makes no sense; you're not going to know the difference anyway. I think it's a good thing if you can save someone else's life, then…

PI: Okay. That was the first part. In the next part, I'm just going to say a series of words or phrases that are oftentimes used in reference to organ and tissue donation or are associated to the topic. What I would like for you to do is, when I say them, if you could just tell me what it is you think about when you hear that in regard to the topic of organ and tissue donation. And, just like before, you're free to answer as in depthly as you like. If it's just a word or two, that's fine, but if you want to expound on them feel free to do so. The first one is SAVE LIVES.

S20: You can save lives because your organs might be useful to other people who need a transplant or whatever.

PI: How about HELP OTHERS?

S20: Yeah, kind of the same thing. Your organs are gonna help someone else who needs them.

PI: Okay, UNSURE?

S20: I can see how some people might, because of religious beliefs or whatever, I'm sure a lot of people are nervous about it or they don't know how it's going to affect the way they look. I'm sure some people don't know exactly how it works. Or, their families might not agree with them.

PI: Okay, how about COMPASSIONATE?

S20: I don't know.

PI: Okay, that's fine. ANXIETY.

S20: Yeah, I guess it would kind of go back to unsure. It might make people a little nervous to think about it or think about when they die. So, it might make people uncomfortable.

PI: The next one is RELIGION.

S20: Yeah, I'm sure, I mean I don't know, but I'm sure some religions don't think it's a good idea. I don't even know what mine would say, but I agree with it so…

PI: How about KNOWLEDGEABLE?

S20: I think it's good to know, I mean I really learned so much, I think they were doing graduate work or something – the people who came in and talked to us – but I found out so much about it that I didn't know. 'Cause I guess I was kind of worried or nervous about it too. But I think it's good to know that it can really help other people.

PI: DISCUSSION WITH OTHERS?

S20: Yeah, like they tell us to talk to our parents or family and friends about it. That's good because they were saying sometimes the family won't grant someone's wishes after they die. Some people don't want to talk about it, especially your parents. But, I think it's important and I guess I'd be a little mad if that's what I wanted and they didn't do it.

PI: Okay, the next is BODY WHOLENESS.

S20: What do you mean when you say…

PI: Just the thought of keeping all of your body parts together.

S20: Okay, yeah, I mean I can understand that; now that you put it that way. I can see that, but I remember what they said, it doesn't change the way you look or anything. So, I don't think it really affects your wholeness if you're missing a couple of things.

PI: The last one is GOOD.

S20: I think it's good to be an organ donator.

PI: That's all that I have here, but in thinking about it and going through these are there any others you think are associated with organ and tissue donation that you think should be included in this list? Anything else you want to add?

S20: No, I think that's good.

PI: Okay, thank you.

Subject #21 (Female, Nondonor)

PI: First off, all I want you to do is talk to me about what it is you think about when you think about organ and tissue donation. Do you have any beliefs you hold about it? Any attitudes or feelings that come to mind when you think about it? Just let me know what those are.

S21: I really don't know much about it at all. I had some friends who took the advanced PR class who did the whole campaign and I try to catch on a little bit to it, but I was busy with classes. I really wasn't able to attend their events and I'm actually, kind of, like, I think since I really don't know about it, I'm kind of like, "I don't want to give up my organs." It's kind of like, it's a topic that I would like to know more about because now I'm kind of opposed. I'm kind of against it just because I don't know, the thought of giving organs is…I don't know.

PI: Okay, so you're not a donor?

S21: Right.

PI: And, do you think, sometimes they refer to it as the "ick factor", just the thought of it freaks you out a little bit? Is it thinking about death or thinking about having…

S21: I actually did go to one of their things and this guy was there talking about how his daughter suddenly died and she gave her organs and it made me think

about it. But, I think that people need to be more educated on it, rather than just having tables set up in random spots throughout campus saying, “Sign a card, be a donor.” A lot of people will walk by and will sign it, but a lot won’t because they’re like, “that’s kind of random.”

PI: Okay. That was the first part. In the next part, I’m just going to say a series of words or phrases that are oftentimes used in reference to organ and tissue donation or are associated to the topic. What I would like for you to do is, when I say them, if you could just tell me what it is you think about when you hear that in regard to the topic of organ and tissue donation. And, just like before, you’re free to answer as in depthly as you like. If it’s just a word or two, that’s fine, but if you want to expound on them feel free to do so. The first one is SAVE LIVES.

S21: It’s probably their slogan, save lives, that’s what I think of.

PI: Okay, how about HELP OTHERS?

S21: By donating your organ you can save somebody’s life, and in doing so you’re helping others.

PI: The next one is UNSURE.

S21: Unsure if you’re organs are really going to get to that person?

PI: It can be if that’s how you perceive of unsure in terms of organ and tissue donation. This is about your thoughts…

S21: I’m very unsure whether I want to be a donor. I’m not a donor as of yet and I’m not motivated to be one.

PI: When you say motivated to be one…is it the education? Not knowing?

S21: Yeah, I think that plays a big part.

PI: Okay, the next one I have is COMPASSIONATE.

S21: I think if somebody does decide to be a donor they are very compassionate because they would be saving somebody’s life.

PI: How about ANXIETY?

S21: I think it’s a really risky decision to make whether or not you want to give up your organs, especially for me because how will I be sure they’re getting to people who need to get them and just that whole process is very risky and ify to me.

PI: The next one is RELIGION.

S21: I'm sure it does have something to do with religion. I don't ever hear of anybody talking about religion when it comes to organ and tissue donation. I don't really know how that comes into play there.

PI: Okay, what about KNOWLEDGEABLE?

S21: I think that if you're a donor, you need to be knowledgeable and in order to be a donor you do have to be knowledgeable. It's something that I'm not.

PI: How about DISCUSSION WITH OTHERS?

S21: A lot of discussion with others has been basically just, "don't you want to save somebody's life?" And, it's like, "yeah, I do want to save somebody's life, but can you tell me more about it?"

PI: Okay, have you had any discussion with family?

S21: No, I haven't. I think if I did talk to my close family about it, it would be a weird conversation. It's something I really don't want to hit upon.

PI: Okay. The next one is BODY WHOLENESS.

S21: I have no idea.

PI: Okay, we can move on. I just have one more and it's the word GOOD.

S21: I guess donating your organs is good. I guess the question is "Are you a good person if you donate your organs, or if you don't, does that make you a bad person?" I think that's what the campaigns are saying because they're saying, "Save lives, donate life," and I think it guilts a lot of people into it.

PI: Okay, that was all that I have, but in thinking about these words and phrases are there any that you think should be added? Or, any ideas or issues that we haven't brought up that you think are important to the topic?

S21: Probably, organ transmission, how it actually works. If somebody decides to give up their organs once they die, how does that work? What's the process?

PI: So, I think from our conversation, your main issue is not having enough understanding about the process and how organs, not only are transplanted, but what decision goes into who's going to get what. Right?

S21: Right.

PI: Okay, thank you very much.

Subject #22 (Female, Nondonor)

PI: First off, all I want you to do is talk to me about what it is you think about when you think about organ and tissue donation. Do you have any beliefs you hold about it? Any attitudes or feelings that come to mind when you think about it? Just let me know what those are.

S22: I think that it's important for people to be an organ and tissue donator. And, I think that many lives are saved each year because of it. I think it's something kind of scary to think about and to discuss because you don't want to think about your own death or how you will be used when you're no longer here. But, at the same time it's very important; but it's also difficult to imagine that somebody else would have to use you in a way that would also save someone else's life.

PI: Are you currently an organ donor?

S22: I'm not.

PI: Is there something that's holding you back from registering or signing a card?

S22: Well, every time I've discussed it or thought about it I've said that it's something that I should consider because it's very important, but it's still so scary to think about and to consider, "Yeah when I die or get into a bad car accident you can use me however you choose."

PI: So, it's just…

S22: I don't know a lot of people that are organ and tissue donors so nobody's ever said, "I've done this and I think it's good and you should do it with me," or I've never heard anyone say, "I've signed and now I'm doing this and…"

PI: So, because you don't know the outcome of becoming a donor and you don't have any firsthand or even secondhand experience about it?

S22: I've heard a couple of presentations in class about how people have signed, have done it and they've saved…everybody is used to save so many lives. But, I've never spoken to someone who has done it and how they've done it and why they've done it.

PI: Okay. That was the first part. In the next part, I'm just going to say a series of words or phrases that are oftentimes used in reference to organ and tissue donation or are associated to the topic. What I would like for you to do is, when I say them, if you could just tell me what it is you think about when you hear that in regard to the topic of organ and tissue donation. And, just like before, you're free

to answer as in depthly as you like. If it's just a word or two, that's fine, but if you want to expound on them feel free to do so. The first one is SAVE LIVES.

S22: Yes, it does save lives and each person who decides to do it can save many lives.

PI: Okay, the second is HELP OTHERS.

S22: It can help others and everybody who decides to do it helps somebody who's suffering.

PI: The next is UNSURE.

S22: I'm unsure of anyone who's ever signed up to be an organ and tissue donator.

PI: How about COMPASSIONATE.

S22: Somebody who signs up for this is compassionate to save others' lives.

PI: Okay, the next one is ANXIETY.

S22: It causes anxiety to think about your death and the way that you'll be used after you're gone.

PI: Okay, what about RELIGION?

S22: It doesn't have anything to do with religion or it wouldn't conflict with any of my religious beliefs.

PI: How about KNOWLEDGEABLE?

S22: You have to be knowledgeable, not only to want to sign up for this, but also to know how to do it.

PI: And, how about DISCUSSION WITH OTHERS?

S22: It would help to have open discussions. The one time I heard about the topic was in one of my previous COM classes and it was helpful to hear the presenters discuss the topic and then open the floor to anybody who had questions…just an open discussion about the topic.

PI: Okay, the next is BODY WHOLENESS.

S22: The reason why some people may not want to do this is in fear that their body will be cut up to be used.

PI: Is that part of your concern?

S22: No, I've just never really spent the time to discuss or think about or…my death or an accident or…

PI: I just have one more and it's the word GOOD.

S22: It is very good when people choose to do this and it benefits people. And, it would be good if it was discussed more so that more people would be aware of it and to consider it and so that more information would be out there about it.

PI: So, what I'm hearing is there should be more awareness and knowledge, are there any other issues or words that you think should be added?

S22: To be honest, I never really heard about this before last semester in one of my COM classes. I didn't ever hear it being brought up; I didn't know what it meant on the back of my driver's license or with that form that comes from the DMV. I didn't know what it was; I never took the time to find out what it was. So, when I heard about it it was the first time. So, to hear it a second time is probably beneficial, too. People don't discuss it a lot because it's not really a topic that people like to talk about or hear about. So, maybe more knowledge about it or more classroom discussion about it would be beneficial.

PI: Thank you very much for coming.

Tuesday February 21, 2006

Subject # 23 (Female, Donor)

PI: To begin, please tell me your thoughts about organ and tissue donation, any beliefs you might hold regarding the issue…your attitudes or feelings, your thoughts, in general, about the topic.

S23: Personally, I feel it's a good thing. I would do it if I was able to. I would gladly give my organs for donation. I know from reading about it that it saves a lot of people's lives and there are a lot of people who need organs and what am I going to do with them once I go?

PI: Okay, have you registered online or have you signed up at the DMV?

S23: I signed the back of my license.

PI: Have you had that witnessed? Have you talked about it with anybody?

S23: I talked about it with my family; my mom and I have talked about it.

PI: Okay, well the next part I'm just going to read off a list of words or phrases that are often used in association with organ and tissue donation. And, if you could just tell me what comes to mind when you hear the word and are thinking about the topic. And, you can answer any way you'd like; if you don't have anything to say about one of the words, just let me know and we'll skip it and go on to the next one. If you only have a word or two, that's fine too, it's all up to you. The first one is SAVE LIVES.

S23: Organ and tissue donation helps to save lives.

PI: The next is HELP OTHERS.

S23: Organ and tissue donation helps to save others.

PI: How about UNSURE?

S23: I do feel people are unsure about participating in something like that.

PI: Can you tell me in what way you think, or why you think, people are unsure?

S23: Well, in spiritual or religious aspects I'm thinking that if they're organs aren't there then they can't really move on or come back.

PI: The next one I have is COMPASSIONATE.

S23: The word doesn't evoke anything.

PI: Okay, we'll move on. How about ANXIETY?

S23: I can see how people can have anxiety thinking about it, especially talking about it with their family, "Oh, well, when I die I want to donate my organs." Well, nobody really wants to think about it. I can see how people might have anxiety attacks over that, I guess.

PI: The next one is RELIGION.

S23: I know, I've read that not a lot of religions have anything against organ and tissue donation. There's nothing stating they can't. I know there's gypsies or something that, if you give up your organs you can't come back in another life. But, I think religiously everyone believes it's good to give to each other and that's what you're doing when you donate your organs and tissues.

PI: The next is KNOWLEDGEABLE.

S23: I don't think enough people are knowledgeable about organ and tissue donation.

PI: How about DISCUSSION WITH OTHERS?

S23: That needs to be done because your family needs to know what your wishes are and just because you sign the card it doesn't mean they'll take them.

PI: How about BODY WHOLENESS?

S23: After they take your organs, you're not going to be very whole, but…I don't know.

PI: The last one is GOOD.

S23: It's good to donate organs and tissues.

PI: Those are all that I've come up with. Are there any other words or phrases that come to mind when you think about the topic? Anything you can add?

S23: Well, I know…brain dead. Just because I know that you can only donate if you're brain dead and I don't think people understand that and I think it would make a big difference if more people knew that and understood the difference between that and cardiac…or

PI: The difference between being in a coma and being brain dead.

S23: Yeah, yeah, yeah. I guess that would be the only word that might…

PI: Okay, thank you.

Subject # 24 (Female, Nondonor)

PI: To begin, please tell me your thoughts about organ and tissue donation, any beliefs you might hold regarding the issue…your attitudes or feelings, your thoughts, in general, about the topic.

S24: I think I kind of have mixed feelings on it. Half of me thinks it's a really good thing to give somebody else a new lease on life. If it was me in that place, I would obviously want that; and, it's a shame for the person that died, but they can't help it once they're dead so they might as well help someone else live. On the other hand, I feel kind of against it because I sort of believe that the body is sacred and to think that somebody who has passed away, like cutting them up or whatever. It just seems like they're desecrating that. And, it might be hard on the family, too, to think that their loved one has already gone through so much and, even though they can't feel it, it's almost a psychological or emotional thing to think of

somebody else doing that to them. It might be stressful to know that they're organs are in somebody else.

PI: So, I'm assuming you're not a registered organ donor?

S24: I'm not.

PI: Are the reasons you just gave the reasons why you are, or what's keeping you from becoming a donor? You sound positive toward it but, the mixed feelings…

S24: I guess it might sound stupid, but I'm kind of superstitious; I think if you put something down like that then something might happen to you. I'm just really like that. I don't mean anything by it, and I know it's a good thing.

PI: Okay, well the next part I'm just going to read off a list of words or phrases that are often used in association with organ and tissue donation. And, if you could just tell me what comes to mind when you hear the word and are thinking about the topic. And, you can answer any way you'd like; if you don't have anything to say about one of the words, just let me know and we'll skip it and go on to the next one. If you only have a word or two, that's fine too, it's all up to you. The first one is SAVE LIVES.

S24: Yeah, it does.

PI: Okay, HELP OTHERS.

S24: Yeah.

PI: The next is UNSURE.

S24: I think a lot of people are unsure. It's kind of a big decision.

PI: Do you think for the reasons you said before, issues of religion or spirituality?

S24: I think a lot of people do still think that way.

PI: The next one I have is COMPASSIONATE.

S24: Maybe, more or less. I don't know.

PI: How about ANXIETY?

S24: I think definitely nobody's comfortable thinking about themselves actually being dead. Nobody wants to think about that. I think that more of a big issue,

more what I meant when I said superstitious. You don't want to think about yourself actually dying.

PI: Okay, the next is RELIGION.

S24: Yeah, I guess so. I don't really know what positions a lot of religions take on the body as soon as somebody is dead. But, speaking from my religious position, I guess the body is something sacred. That doesn't mean that you can't be an organ and tissue donor. In fact, I probably think that they'd encourage it. I guess it just all depends on the person in the end; how they feel about what they would want done with they're organs.

PI: The next is KNOWLEDGEABLE.

S24: Maybe not really. I think people already know that it would make an impact even if just one organ were donated to somebody. I don't think that's really an issue, they realize what it could do.

PI: Okay, how about DISCUSSION WITH OTHERS?

S24: I don't think a lot of people do.

PI: Okay, have you had any discussions with family or friends about the topic?

S24: No, my dad needed an organ a few years ago. He didn't get it, but it wasn't really something that was discussed or even in another context.

PI: How about BODY WHOLENESS?

S24: Like, after death or…?

PI: I guess it could be either. There are such things as living donors. Some people might give a kidney or part of a liver. So, whatever context you think of it.

S24: As far as living donors, I think that's fine. From what I read, you can lead a normal life if you're a donor. I think that's fine. But, if you're dead I don't think it should make much of a difference.

PI: The last one that I have is the word GOOD.

S24: I would say maybe just neutral on that. I mean you have to respect people's wishes and opinions; it doesn't make them good or bad whether they decide to do or don't. It's just personal preference.

PI: Those are all that I've come up with. Are there any other words or phrases that come to mind when you think about the topic? Anything you can add?

S24: Maybe instead of stressing the people who do get it and whose lives are changed, in addition to that maybe stressing the massive number who don't. I think it would be pretty depressing to think of all these people are waiting for this one type of organ. To think that they, so many people die each day that could have helped them but didn't or couldn't.

PI: Okay, thank you very much for coming in.

Subject # 25 (Female, Donor)

PI: To begin, please tell me your thoughts about organ and tissue donation, any beliefs you might hold regarding the issue…your attitudes or feelings, your thoughts, in general, about the topic.

S25: I don't really see any reason to be anti-organ and tissue donation. I have known people who have donated bone marrow and stuff, more people that they know than that…just kind of a random thing. I think it can only be good and, even after you die, if your tissues are still good, I don't think it takes away from your body or anything, to have your kidneys removed or anything to be given to someone else who can use them.

PI: Okay, are you currently a donor? Are you registered online or at the DMV?

S25: I've signed the back of my license, that's really it. I'm not registered; I never registered anywhere.

PI: Okay, well the next part I'm just going to read off a list of words or phrases that are often used in association with organ and tissue donation. And, if you could just tell me what comes to mind when you hear the word and are thinking about the topic. And, you can answer any way you'd like; if you don't have anything to say about one of the words, just let me know and we'll skip it and go on to the next one. If you only have a word or two, that's fine too, it's all up to you. The first one is SAVE LIVES.

S25: When I think of that, I think of all the shows that they have on, like there's that huge movie about that daughter who needed bone marrow and her parents had the other daughter to save her. It was a big t.v. movie of the week a few years ago based on a true story and how they had another kid and who was able to donate the bone marrow. I generally think of family when you talk about it, but strangers can do it too I guess.

PI: How about HELP OTHERS?

S25: I think when I hear help others, I think of it as less extreme than save lives. I think, maybe like giving a kidney when I have two, that's such a bigger

commitment, I guess. Not that anything else isn't, but I think of it as less, I guess less involving.

PI: Okay, the next is UNSURE.

S25: I think that's what most people are because I'm assuming most people aren't registered. What it involves and obviously the person who needs it is more unhealthy than you are, but what it would take from your body to donate.

PI: Okay, how about COMPASSIONATE?

S25: I guess to give that much of yourself, especially strangers who do it, to care that much about other people to donate.

PI: The next is ANXIETY.

S25: I think just the long term effect. I don't really know that much about it, if you donate bone marrow, how much of your…how long it takes to replenish itself. I guess it takes a lot more education which takes a lot more time on people's part.

PI: Okay, the next is RELIGION.

S25: I don't even know what my faith says about it. I would assume if you're trying to be a good person and follow the right path it would be for it. But, I guess you never know with some religions. I would think it would be pro, but I don't really know.

PI: The next one is KNOWLEDGEABLE.

S25: I think that's what most people lack, I would think. Just because I would hope people wouldn't do it, not to be mean or anything, but that they don't know what is involved and even, I was watching a show the other day, Extreme Home Makeover, and some guy donated bone marrow. And, my boyfriend even asked whose insurance pays for it and things like that. That kind of thing.

PI: How about DISCUSSION WITH OTHERS?

S25: I think that's probably something you don't do unless it happens to you; if you knew someone who needed it, then you would start but….I don't usually see that many people talking about it until it's brought right to the light.

PI: Okay, the next one is BODY WHOLENESS.

S25: To me it wouldn't really take anything away from…obviously physically it does, but I don't think of the body as just being physical. So, to me, it wouldn't.

PI: Okay, and I just have one more here and it's the word GOOD.

S25: I guess that would encompass the whole thing and to be able to do that and willing to do it and to know that much about it and to take that much time out of your life to do it would be good, to put it mildly.

PI: Those are all that I've come up with. Are there any other words or phrases that come to mind when you think about the topic? Anything you can add?

S25: I think the big one I always think of when people do it is the whole time part of it. Being able to sacrifice that much of your daily time, which is so valuable to most people, to do that for another person. And, strangers fascinates me the most, people who aren't doing it for their family member…they just go out and do it just because.

PI: Anything else?

S25: No, that's it.

PI: Well, thank you.

Subject # 26 (Female, Nondonor)

PI: First off, all I want you to do is talk to me about what it is you think about when you think about organ and tissue donation. Do you have any beliefs you hold about it? Any attitudes or feelings that come to mind when you think about it? Just let me know what those are.

S26: My overall attitude toward it is positive. I don't know that much about it, the whole detail about it other than the whole sign up at the DMV and get your little card. I'm not against it, I'm actually for it; it's something that I'm interested in doing. It's not something I'm going to sign up for yet, not until I get more information on it. But overall my attitude is positive on it. I have no beliefs against it and I don't know too many people or even in my family who are against it. It's not something that I know a lot of people have done or are doing, but I don't have anything against it.

PI: Okay, do you think the only reason you haven't signed up yet is because you don't have a lot of information?

S26: Yeah, I don't have a lot of information. It's something that, right now, for me I'm too young to, not to young really, it's just not in my thought process really.

PI: Okay. That was the first part. In the next part, I'm just going to say a series of words or phrases that are oftentimes used in reference to organ and tissue donation or are associated to the topic. What I would like for you to do is, when I

say them, if you could just tell me what it is you think about when you hear that in regard to the topic of organ and tissue donation. And, just like before, you're free to answer as in depthly as you like. If it's just a word or two, that's fine, but if you want to expound on them feel free to do so. The first one is SAVE LIVES.

S26: I think it does save lives, absolutely. I don't know a lot about it other than they take your organs and bring them to where ever the list is but…I think absolutely it's one hundred percent of that.

PI: Okay how about HELP OTHERS?

S26: I would put that as the same as saving lives.

PI: Okay, how about UNSURE?

S26: I'm unsure about the topic, I guess that could fit that. I think the only uneasy part of the organ donation is the whole process of it. Like I said, I don't know how it goes. I don't know if they do it after the funeral thing or, I don't really know how it works. That's what I would definitely be unsure about with that word for organ donation.

PI: Okay, how about COMPASSIONATE?

S26: Yeah, I guess the compassion for helping others. I think it's a very considerate thing to do, to donate yourself for it. I think I know some families who actually wouldn't like it, I don't know too many. But, I think compassion, you have to have some kind of compassion for others.

PI: Okay, how about ANXIETY?

S26: I don't think it at all there's any anxiety with it or I wouldn't personally find any anxiety with it.

PI: The next is RELIGION.

S26: I don't see anything with it. I guess some religions are against it. Mine is Catholic, maybe I don't know my religion well enough, but I think I'm fine with it.

PI: The next is KNOWLEDGEABLE.

S26: For me personally, I would like to be more knowledgeable in it before I do it. I wouldn't just sign on it just to get whatever I get from it, but I think you have to be knowledgeable to agree with it.

PI: Okay, and DISCUSSION WITH OTHERS.

S26: With organ donation, I don't think I would have to discuss it with others, maybe family members that I know would immediately be interacting with me with my death. But, other than that I think it's a personal decision.

PI: Okay, so have you ever had a conversation with anyone about it?

S26: No.

PI: Okay, the next is BODY WHOLENESS.

S26: I don't think it's a big deal. If I'm dead, it's theirs. I don't need my whole body to be buried with me.

PI: Okay and the last one is the word GOOD.

S26: I think overall organ donation is good. I don't see anything against it, like I said and I don't see anything bad with it, to associate the word bad with it.

PI: Okay, those are the only ones I have thought of. Are there any others that come to mine while talking or thinking about these that you think should be included, or that you could add to the list?

S26: No. The whole time I talk about organ donation, I just think of family though. Like I said with knowledgeable or not even associated with others, it is something that has to be discussed with immediate family members who are dealing with you. Such as if I had kids or my husband or people beyond that, but other than that.

PI: Well, that's all. Thank you.

Subject # 27 (Female, Donor)

PI: First off, all I want you to do is talk to me about what it is you think about when you think about organ and tissue donation. Do you have any beliefs you hold about it? Any attitudes or feelings that come to mind when you think about it? Just let me know what those are.

S27: I basically think of the opportunity to save lives of other people.

PI: Okay, are there any beliefs that you hold on the topic?

S27: I think it's one of the best things you can do, as far as being able to help people when you can no longer do anything.

PI: Are you currently an organ donor?

S27: Yes.

PI: Okay. That was the first part. In the next part, I'm just going to say a series of words or phrases that are oftentimes used in reference to organ and tissue donation or are associated to the topic. What I would like for you to do is, when I say them, if you could just tell me what it is you think about when you hear that in regard to the topic of organ and tissue donation. And, just like before, you're free to answer as in depthly as you like. If it's just a word or two, that's fine, but if you want to expound on them feel free to do so. The first one is SAVE LIVES.

S27: The opportunity to do it. Why not take the chance?

PI: And, HELP OTHERS.

S27: You can only help others by doing this.

PI: Okay. The next one is UNSURE.

S27: If you're unsure you can just find out information about all the good stuff it does.

PI: The next is COMPASSIONATE.

S27: I think as far as families deciding after something has happened to someone, they show compassion for the people who are suffering.

PI: And, ANXIETY.

P27: Anxiety about deciding whether or not to do it.

PI: And, how about RELIGION?

S27: I don't really have anything that…

PI: Okay, that's okay. How about KNOWLEDGEABLE?

S27: Just knowing what good it does, and what goes where and how it can help and statistics and stuff.

PI: Okay, and DISCUSSION WITH OTHERS.

S27: Discussion with your family so they know how you feel about it and what you would want to do in certain situations.

PI: Have you had a discussion with your family?

S27: Yeah, with my mom.

PI: The next is BODY WHOLENESS.

S27: I guess people have anxiety about it; when they go in the ground they won't be whole. But, not me.

PI: And, the last one is the word GOOD.

S27: I think it's a good thing to do.

PI: Okay. A question I should have asked previously, in becoming a donor what was it that led you to that decision?

S27: I always thought it was something that, because after your gone you're just going to be remembered for what you are now. And, then my friend passed away and her, whatever was good on her was donated. So, it kept…

PI: So, you've had a personal experience with it.

S27: Yeah, and you can see all the good.

PI: Well, those were the only words that I had. Are there any others that should be added to the list, anything that for you comes to mind when you think about organ and tissue donation?

S27: I don't think so.

PI: Okay, thank you.

Subject # 28 (Female, Nondonor)

PI: First off, all I want you to do is talk to me about what it is you think about when you think about organ and tissue donation. Do you have any beliefs you hold about it? Any attitudes or feelings that come to mind when you think about it? Just let me know what those are.

S28: I don't think I would mind, I don't think I'm officially a donor though. I know there's something on the back of your license, but that doesn't really mean anything does it?

PI: Well, not really. There are a couple of ways to do it, that's one way. You can also go online to register or while you're at the DMV. But the most important, the better way, whether you sign anything, you have to talk to your family because they are the ones who actually make the decision. So, you can say you want to

be, but if your family doesn't know you want to be and they don't want you to be then it won't happen.

S28: I think it's definitely a good thing because after you're not going to need them for anything so why not help someone else.

PI: You're positive about it, but I'm assuming you haven't even signed the back of your license?

S28: No.

PI: Okay, is there something that's keeping you from doing that?

S28: I just haven't taken the time to do that. I've seen, they had people on campus last year signing people up, and I was like, "Oh, I should do that." But, I just never did. I don't know why.

PI: Okay. That was the first part. In the next part, I'm just going to say a series of words or phrases that are oftentimes used in reference to organ and tissue donation or are associated to the topic. What I would like for you to do is, when I say them, if you could just tell me what it is you think about when you hear that in regard to the topic of organ and tissue donation. And, just like before, you're free to answer as in depthly as you like. If it's just a word or two, that's fine, but if you want to expound on them feel free to do so. The first one is SAVE LIVES.

S28: You're giving your organ to someone else to save their life. That's the basis of it, isn't it?

PI: Okay, the next is HELP OTHERS.

S28: You're helping others by letting them survive even though you're obviously not. But, your organs are helping someone else by saving their life.

PI: Okay, how about UNSURE?

S28: Maybe some people are unsure how to do it. I'm not sure…

PI: The next is COMPASSIONATE.

S28: It shows…you're helping someone else live, you're helping their family too by keeping that person around. That's compassion for the patient and the family.

PI: Okay, how about ANXIETY?

S28: Maybe some people get kind of freaked out about their organ going into someone else or them not being a complete person at burial or something.

PI: Okay, how about RELIGION?

S28: I don't know if it's against any one religion. I assume it might be, and then again with the funeral and everything, I don't know if…I doubt it has anything to do with having an open casket, I don't know if they'd take that much, but..

PI: What about KNOWLEDGEABLE?

S28: Some people probably don't know a lot about organ and tissue donation. They might not even know that it's possible.

PI: Okay, DISCUSSION WITH OTHERS?

S28: Like you said, you have to tell your family. So, it's probably a key issue – discussing it with them so that they know.

PI: Have you had any discussions with anybody?

S28: I don't think directly, it might have come up like as a topic and we talked about it. I don't think anything serious was established.

PI: How about BODY WHOLENESS?

S28: Like, just having all your organs intact after you do die. Your body's not whole without every working part.

PI: Okay, and the last one I have is GOOD.

S28: I think that donation is good. It's helping other people. I mean even the donator's family should feel good about helping someone else. Like even though there was a loss in your family, you can help someone else's family.

PI: Okay, those were the only words that I had. Are there any others that should be added to the list, anything that for you comes to mind when you think about organ and tissue donation?

S28: Not really.

PI: Okay, that's fine. Thank you very much for coming in.

Subject # 29 (Female, Donor)

PI: First off, all I want you to do is talk to me about what it is you think about when you think about organ and tissue donation. Do you have any beliefs you

hold about it? Any attitudes or feelings that come to mind when you think about it? Just let me know what those are.

S29: Okay. I'm a tissue donor. In fact, I just renewed my license and I just put it down. So, I just feel like it's a good thing to do. I don't really have any strong beliefs about it, but, I mean, if it could help someone else out. Then, that's how I feel.

PI: Okay, so was the helping thing the major push behind your decision to become a donor?

S29: Yeah.

PI: Okay. That was the first part. In the next part, I'm just going to say a series of words or phrases that are oftentimes used in reference to organ and tissue donation or are associated to the topic. What I would like for you to do is, when I say them, if you could just tell me what it is you think about when you hear that in regard to the topic of organ and tissue donation. And, just like before, you're free to answer as in depthly as you like. If it's just a word or two, that's fine, but if you want to expound on them feel free to do so. The first one is SAVE LIVES.

S29: Yeah, I think it could do that.

PI: And, HELP OTHERS.

S29: Yeah.

PI: How about UNSURE?

S29: Yeah. I'd say another yes to that.

PI: You think that people could be unsure about, or that you are unsure?

S29: No. I just think that the whole thing is a little but fuzzy. There's not a ton of information on it.

PI: How about COMPASSIONATE?

S29: I think organ donors are compassionate.

PI: And, ANXIETY.

S29: No.

PI: Okay, RELIGION.

S29: No.

PI: How about KNOWLEDGEABLE?

S29: I don't think that the whole thing is very knowledgeable.

PI: So, you don't think…there's not enough information available for people?

S29: Yeah.

PI: Okay, DISCUSSION WITH OTHERS.

S29: Doesn't come up very often for discussion.

PI: Okay, have you had any discussions regarding the topic with family or friends?

S29: Well, I'll just kind of ask my friend, "I'm a donor, are you a donor?" or something like that.

PI: Okay, how about BODY WHOLENESS.

S29: Whatever.

PI: And the last one is GOOD.

S29: It's good to do.

PI: Okay, those were the only words that I had. Are there any others that should be added to the list, anything that for you comes to mind when you think about organ and tissue donation?

S29: I'd say selfless, education. You need to have an education about what that means when you sign up. That'd probably be it.

PI: Okay, thank you very much.

Subject # 30 (Female, Nondonor)

PI: First off, all I want you to do is talk to me about what it is you think about when you think about organ and tissue donation. Do you have any beliefs you hold about it? Any attitudes or feelings that come to mind when you think about it? Just let me know what those are.

S30: I think it's a really good thing. I don't have any concrete facts. I haven't done a lot of research on the topic, but I know that as far as organ donations go and

people needing organs I know that some of the lists tend to be real lengthy and I donate blood and I think it's a good thing. It really doesn't take much to donate blood, just some of your time, then your done and you're good to go. I think organ and tissue donation is something…it's a good thing because a lot of people need organs and…

PI: Are you a registered organ donor?

S30: I am not. I plan to be one, but right now I am not.

PI: Is there something that has been keeping you from registering either online or at the DMV? Is it just a matter of a lack of opportunity?

S30: Last semester in my COM 101 class, we started talking about organ and tissue donation. A guy came in and was talking about it and I was thinking about it then. But, ever since then I really haven't thought about it a lot. And, then when I heard about this, the research that you were doing, I started thinking about it again.

PI: So, it really hasn't been in the forefront of your mind.

S30: Right, right.

PI: Okay. That was the first part. In the next part, I'm just going to say a series of words or phrases that are oftentimes used in reference to organ and tissue donation or are associated to the topic. What I would like for you to do is, when I say them, if you could just tell me what it is you think about when you hear that in regard to the topic of organ and tissue donation. And, just like before, you're free to answer as in depthly as you like. If it's just a word or two, that's fine, but if you want to expound on them feel free to do so. The first one is SAVE LIVES.

S30: Organ and tissue donation can save lives.

PI: Okay, HELP OTHERS.

S30: It can help others.

PI: How about UNSURE?

S30: Probably, unsure would be what maybe a lot of people think about organ and tissue donation because it's not really out there that much. Like the Red Cross, they do blood drives all the time and it's always out there. You don't really see a lot of infomercials or commercials on t.v. about organ and tissue donation. It's not really out there as much as some of the other things like blood donation and donating to certain charities or the Christian Children's Fund. You don't see it

as much as all those others. Society's not as informed about that, so they may be unsure.

PI: Okay, how about COMPASSIONATE?

S30: Maybe just one of the qualities an organ and tissue donor would have.

PI: And, ANXIETY.

S30: Another quality. I've heard a lot of people say if it says on your drivers's license that you're an organ and tissue donor, that if you're in a car accident the EMTs aren't gonna work as hard to save your life if they see that you're a donor. My father, who's a fireman and an EMT, told me that that's not true. But, a lot of people have anxiety about it. They feel like since they're publicly showing that they would donate their organs people might think of them as more of a specimen than as a human life.

PI: Okay, the next word is RELIGION.

S30: I'm not a real religious person, but I am religious. I just think when it's your time, it's your time. So, and I figure when I'm gone I'm not going to be using my organs and, if they're healthy enough, if someone else can benefit, by all means take them. My own decision about wanting to become an organ and tissue donor is just, from what I've seen on t.v….it's not like documentaries, it's more or less the medical shows like House they talk about how long the donor lists are and the procedure of deciding who gets an organ and who does not. I don't know how much of it is true from what I've seen on t.v., but if they do go through a series of interviews or they go through a series of questions and screening to find out how worthy the person is of it – are they going to lead a healthy lifestyle, are they going to appreciate it? I don't think religion played a hundred percent of the part of me choosing, it's just more my frame of thinking. Wanting to help people.

PI: The next one is KNOWLEDGELABE.

S30: The only thing I could say is that people really aren't that knowledgeable about organ and tissue donation. I may be one of them.

PI: The next is DISCUSSION WITH OTHERS.

S30: Something that's a necessity if you are going to be an organ and tissue donator. You have to talk about it with your family. And, you have to let them know that this is what I want when I'm gone. So, make sure there's going to be no problem when you are gone. It's just like anything else. Like, what you want done. Both of my parents don't want to be hooked up to ventilators and they've already talked to me and my brother about it. Neither of them, they're not organ and tissue donors. but, I think if you want to become one you have to let your

family know. It's big, and they don't want any surprises, and they don't want a big argument.

PI: How about BODY WHOLENESS?

S30: I don't really have anything on it.

PI: That's fine. The last one I have is the word GOOD.

S30: It is good to be an organ and tissue donor. It's a very good thing.

PI: Those were the only words that I had. Are there any others that should be added to the list, anything that for you comes to mind when you think about organ and tissue donation?

S30: Now, I'm thinking of knowledgeable; maybe information. I was thinking along the lines of when I was talking about you don't see a lot about it on t.v., on commercials. They don't push it as much as blood donation. I mean, every time you see a national disaster with 9/11 and hurricane Katrina and earthquakes and mudslides, a lot of people talk about blood donations and donating clothes and food and time and water. You don't hear a lot about organ and tissue donation. It doesn't seem to be out there that much.

PI: Other people have said awareness.

S30: Right.

PI: That's all that I have. Thank you very much for your time; thanks for coming in.

Subject # 31 (Female, Nondonor)

PI: First off, all I want you to do is talk to me about what it is you think about when you think about organ and tissue donation. Do you have any beliefs you hold about it? Any attitudes or feelings that come to mind when you think about it? Just let me know what those are.

S31: I think it's a really good thing to do it, although I personally am not signed up to do it. I've heard so many things about it, I took public speaking and a girl did a thing on it, and I know all of the different things and the misconceptions. But, I think in the back of my head I really feel, what if I'm in a car accident, and they're like, "Oh, she's a donor." Even though I know that they don't really do that, it's still in the back of my mind which is what I think is mainly the reason why I haven't signed the back of my license or registered to do it.

PI: Are there any other, you said mainly, reasons?

S31: Not that I can really think of.

PI: Okay. That was the first part. In the next part, I'm just going to say a series of words or phrases that are oftentimes used in reference to organ and tissue donation or are associated to the topic. What I would like for you to do is, when I say them, if you could just tell me what it is you think about when you hear that in regard to the topic of organ and tissue donation. And, just like before, you're free to answer as in depthly as you like. If it's just a word or two, that's fine, but if you want to expound on them feel free to do so. The first one is SAVE LIVES.

S31: I always feel bad that I'm not an organ donor because I think of what if I did die or something. Little kids could have benefit. I always feel bad. I should probably do it.

PI: How about HELP OTHERS?

S31: Kind of like the same thing comes to mind. I like to do community service and help others, it makes you feel good knowing you've helped somebody else who's less fortunate.

PI: What about the word UNSURE?

S31: Unsure makes me think of my position. The fact that I do support it and want to, but something about it still makes me hesitant to sign up to be one.

PI: The next one's COMPASSIONATE.

S31: It makes me think that you have to be a compassionate person to…obviously the people who sign up for it are all compassionate people who are donators.

PI: ANXIETY.

S31: Nothing comes to mind.

PI: Okay, what about RELIGION?

S31: I guess that could be a reason, it's not a personal reason why I don't do it, but it could be a personal reason why other people don't do it. Aren't there some religions that they don't want you to get buried or something if you don't have all of your organs intact?

PI: Not many, but there are some where you can't even get tattoos or piercings.

S31: Yeah, they don't believe in it.

PI: The next one is KNOWLEDGEABLE.

S31: That just makes me think of all the misconceptions that I said I heard. I've heard speeches about it done before and heard all the misconceptions that people have about organ and tissue donation. Misconceptions that you can't get buried if you don't have all of your organs intact or that a doctor's going to purposely let you die if they see that you're an organ donor, if somebody is waiting for something.

PI: The next one is DISCUSSION WITH OTHERS.

S31: That makes me think…I've always heard that you should tell other people that you're planning on being a donor. You should tell your parents or whoever so they're expecting it; they know that you plan on doing it. Or, can't they give consent even if they're not…

PI: Actually, you can sign up to be a donor, but if you don't tell anybody, if you don't tell your parents your wishes and they don't know and they don't want to donate then you wouldn't be able to. If that time were to come, people from the organ procurement organization would come and talk to your family first and if they don't know your wishes then they might say no. Have you ever had a conversation about organ and tissue donation.

S31: No, I haven't.

PI: The next one is BODY WHOLENESS.

S31: I don't know, I think it's kind of stupid. The reason I don't do it doesn't have anything to do with, "Oh, I'm not going to have a liver when I'm buried." I could care less; I think it's a dumb reason not to do it, personally. I don't think that should even matter.

PI: The last one is the word GOOD.

S31: I can't think of anything.

PI: That's okay. Those were the only words that I had. Are there any others that should be added to the list, anything that for you comes to mind when you think about organ and tissue donation?

S31: I just think it's something that people probably don't think about a lot as another reason why people don't sign up. Because unless something…I hear about doing this now and hear about it in my classes, but otherwise I don't think about it unless you watch a movie or you hear a specific story, like, "Oh this

person needs a liver or whatever." It's not something that's always going through your mind; it's not as visible as other health stuff. So, you're not thinking about it as much, so people don't. I don't pull out my license and look at the back. So, I think that's one reason why it's important to increase awareness about it because I don't think it's as much as a health topic…it's not as talked about or in the media as much as other stuff. It's not on people's minds all the time.

PI: Okay, well thank you very much.

Subject # 32 (Female, Nondonor)

PI: First off, all I want you to do is talk to me about what it is you think about when you think about organ and tissue donation. Do you have any beliefs you hold about it? Any attitudes or feelings that come to mind when you think about it? Just let me know what those are.

S32: I definitely feel as thought it's a positive thing to do if you're healthy and if it doesn't contradict any of your ethical beliefs or moral beliefs, then I think that it is something that you should do in your lifetime if you have a chance or after…when you die. I think a lot of people can benefit from it. There's no reason not to help other people.

PI: Okay, may I ask if you are a registered organ donor?

S32: No.
PI: Is there something that has been keeping you from becoming one?

S32: I don't know anything about it.

PI: Okay, so it's lack of information.

S32: Yes.

PI: Lack of knowledge about how to go about doing so also?

S32: Yes.

PI: Okay. That was the first part. In the next part, I'm just going to say a series of words or phrases that are oftentimes used in reference to organ and tissue donation or are associated to the topic. What I would like for you to do is, when I say them, if you could just tell me what it is you think about when you hear that in regard to the topic of organ and tissue donation. And, just like before, you're free to answer as in depthly as you like. If it's just a word or two, that's fine, but if you want to expound on them feel free to do so. The first one is SAVE LIVES.

S32: It's a nice thing to do.

PI: The next is HELP OTHERS.

S32: Something we should all do.

PI: Okay, how about UNSURE?

S32: I guess it's a feeling a lot of us have due to ignorance or being naïve.

PI: Okay, how about COMPASSIONATE?

S32: I guess it's something somebody must feel in order to do something such as donate their tissue.

PI: Okay, ANXIETY.

S32: Something that hopefully can be overcome in order to do things that we have an obligation to do.

PI: Would you then consider donating an obligation? A moral obligation of some sort?

S32: Yeah, I would.

PI: Okay, the next one's RELIGION.

S32: Something we believe in that guides our thoughts and our daily activities.

PI: Okay, in relation to organ and tissue donation, do you think that would have, for you does it influence your thoughts about organ and tissue donation?

S32: It would because my religion tells me to help others, otherwise I don't see any relation.

PI: Okay, how about KNOWLEDGEABLE?

S32: Something we need to be in order to live our lives to the fullest?

PI: And, to donate too? I know you mentioned earlier…

S32: Yeah, definitely.

PI: Okay, how about DISCUSSION WITH OTHERS?

S32: I don't know; I'm sorry.

PI: That's okay. Have you ever had a discussion with?

S32: No.

PI: Okay, how about the issue or concept of BODY WHOLENESS?

S32: I don't think that it's something that necessarily has to be fulfilled physically. I know our body has the ability to rejuvenate itself in a lot of ways.

PI: Okay, the last one that I have is the word GOOD.

S32: I don't know.

PI: If nothing comes to mind that's okay. That's the reason why I'm doing this, because some of these shouldn't be included on the list because maybe they really aren't related.

S32: Okay, good.

PI: Okay, those were the only words that I had. Are there any others that should be added to the list, anything that for you comes to mind when you think about organ and tissue donation?

S32: Probably, a word…something to do with public…

PI: Awareness?

S32: Yeah, awareness. Public awareness.

PI: Anything else?

S32: I guess, opportunity. That would probably go with public awareness.

PI: To donate? To actually sign the card? Okay, so, no opportunity has ever presented itself to you?

S32: No.

PI: Okay, well that's all that I have. Thank you