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Understanding Social Responsibility Using the Theory of Planned Behavior: The Connecticut Gatekeeper Program

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Understanding Social Responsibility Using the Theory of Planned Behavior:

The Connecticut Gatekeeper Program

Dwight Lawrence Norwood, PhD

University of Connecticut, 2015

The public is often encouraged to engage in socially responsible behaviors for the good of society, sometimes on behalf of those most vulnerable; older adults are one such rapidly growing vulnerable population. Nationally policies trend toward helping older adults remain at home rather than entering skilled nursing facilities when they encounter difficulty looking after themselves due to failing health. Although community supports are available, many are unlikely to access them, due to the very nature of their problems, such as depression and dementia. Across the U.S., gatekeeper programs encourage community members to make referrals to social service agencies which can help older adults remain safely at home. This research, informed by the Theory of Planned Behavior and the Bystander Effect, was undertaken to better understand social responsibility, specifically factors which promote or inhibit willingness to refer older adults to social service agencies, as reflected by intention to make such a referral. In order to undertake this research, it was necessary to develop a scale to measure specifically intention to refer older adults to a social service agency, the Social Service Agency Referral Scale. Three groups were studied: senior center attendees, seniors who received Gatekeeper Program training, and people who had made referrals to the Connecticut Gatekeeper Program. Demographic factors were not found to be related to the intention to refer, as measured

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by the Social Service Agency Referral Scale, nor was membership in any of the three study groups. Gatekeeper Program training increased intention to refer significantly. The level of perceived emergency and the intention to refer did not interact significantly. The intention to refer (as measured by the Social Service Agency Referral Scale) and the Abbreviated Social Responsibility Scale were significantly positively correlated. The research extends use of the Theory of Planned Behavior further into social work. This research also extends the body of scholarly knowledge regarding socially responsible referral behaviors in general, and the action of referring older adults to social service programs in particular. The research provides valuable information for programs which seek public participation in socially responsible behaviors.

Understanding Social Responsibility Using the Theory of Planned Behavior:
the Connecticut Gatekeeper Program

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ii

APPROVAL PAGE

Doctor of Philosophy Dissertation

Understanding Social Responsibility Using the Theory of Planned Behavior:
the Connecticut Gatekeeper Program

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Table of Contents

List of Tables	ix
List of Figures	x
Chapter 1: Introduction to the Problem	1
Background	1
Chapter 2: Literature Review	6
Introduction	6
Conceptual and Theoretical Framework	6
Altruism, Social Responsibility and Prosocial Behavior – “Do the Right Thing”	6
Social Marketing	10
Identifying and Assisting the Vulnerable Elderly	15
Gatekeeper Program	18
Bystander Effect	24
A Theory of Planned Behavior.	27
Significance and Justification.	32
Research Questions and Related Hypotheses	32
Chapter 3: Methodology	35
Introduction	35
Design	35
Sampling and Power	36
Instruments	40

Reliability and Validation of the Social Services Agency Referral Scale	45
Reliability.....	46
Validity	47
Data Analysis Procedure.....	51
Data Management	51
Statistical Analysis.....	51
Protection of Human Subjects.	54
Chapter 4: Findings.....	55
Introduction.....	55
Descriptives.....	56
Descriptions and Demographics	58
Collection sites.....	58
Gender.....	59
Rurality	61
Education	61
Racial Identity.....	61
Age.....	62
Civic Organization Membership.....	64
Emergency and Non-Emergency Responses	65
Perceived Emergency Index	67
Intention to Refer Differences by Demographic Values.....	68
Intention to Refer Differences by Survey Group.....	70

Hypothesis Testing.....	71
Findings Related to Hypothesis 1	71
Findings Related to Hypothesis 2	73
Findings Related to Hypothesis 3	74
Findings Related to Hypothesis. 4	76
Findings Related to Hypothesis 5	77
Other Findings	78
Chapter 5: Discussion and Implications	82
Introduction.....	82
Project Overview	82
Discussion of Hypotheses Testing.....	84
Discussion of Findings for Hypothesis 1	84
Discussion of Findings for Hypothesis 2	85
Discussion of Findings for Hypothesis 3	86
Discussion of Findings for Hypothesis 4	87
Discussion of Findings for Hypothesis 5	88
Limitations	90
Future Directions for Research	93
Significance for the Gatekeeper Program	97
Significance for Social Work.....	97
References	102
Appendix A: Institutional Review Board Approval Letter.....	128

Appendix B: Institutional Review Board Amendment Approval	129
Appendix C: Recruitment Materials	130
Appendix D: Information Sheets	133
Appendix E: Community Survey	136
Appendix F: Training Survey	141
Appendix G: Referral Survey	147

List of Tables

Table 1. Descriptive Statistics for Sub-scales of Social Service Agency Referral Scale .	43
Table 2. Abbreviated Social Responsibility Scale Statements with Scoring Direction and Revised Wordings	45
Table 3. Differences in Measures of Intention to Refer by Survey Group	47
Table 4. Missing Value Substitutions by Sub-scale and Statement.....	53
Table 5. Descriptive Statistics for Scales by Study Group	57
Table 6. Surveys by Type and Location	59
Table 7. Gender, Rurality, Education, Race and Age by Survey Type	60
Table 8. Non-emergency Response Activities.....	66
Table 9. Respondents Willing to Take Action for an Older Adult Who Was a Stranger .	68
Table 10. Differences in Measures of Intention to Refer by Demographics	69
Table 11. Frequency of “Will Call” Question for Post-Training Respondents.	80

List of Figures

Figure 1. The Theory of Planned Behavior28

Figure 2. Frequency Distribution by Age of All Respondents64

Chapter 1: Introduction to the Problem

Background

Historically there have been a variety of efforts to encourage the public to engage in prosocial behaviors for the good of society. In some respects, this might be epitomized as “do the right thing,” a theme which appears in initiatives as disparate as a 19-year old St. Louis effort to encourage and reward school children for good deeds to President Obama’s more recent admonition to “Do the right thing” in supporting gun control (“Do the Right Thing of Greater St. Louis, Inc.,” n.d.; ‘Obama on guns: "let's do the right thing"', n.d.). Other initiatives have included “Click it or Ticket” (“NCDOT initiatives: Click it or ticket,” n.d.) encouraging seat-belt use; “If you see something, say something” (“If you see something, say something” campaign’, n.d.), a Homeland Security program to increase citizen awareness of potential terrorist threats, and “SeeClickFix” (“About SeeClickFix,” n.d.) which uses cell phones’ GPS technology to help identify and locate problems ranging from pot-holes in city streets for urban street repair to invasive species for action by environmental experts. These campaigns fall generally under the umbrella of “social marketing,” a term first used (Henley, Raffin, & Caemmerer, 2011) in 1971 (Kotler & Zaltman) to refer to the application of commercial marketing principles in the context of socially desirable goals. Similarly, this study investigates prosocial behavior by focusing on a specific Connecticut social service program which is promoted through social marketing and which benefits the elderly, the Gatekeeper Program. The study was intended to provide insight into motivating factors for referral-making behavior, and also to provide some practical results which could be used to help the current Gatekeeper

Program enhance its social marketing, and other similar programs that involve prosocial behavior.

Many of those over age 65 are in need of services (Gurian, 1982) yet tend not to avail themselves of available social services (Toseland, Decker, & Bliesner, 1979) in part because they are unaware of them (Toseland et al., 1979). Indeed, even social workers may not be fully aware of the range and availability of community services, which has led to recent efforts to improve the training of social workers and other professionals and paraprofessionals in the area of gerontology (Bonifas, 2011; Rowan, Faul, Birkenmaier, & Damron-Rodriguez, 2011; Stevens-Roseman & Leung, 2004; Volland & Berkman, 2004). Meeting the needs of the elderly is particularly problematic for Connecticut as it is the seventh oldest state in the U.S. when ranked by median age (*Aging issues fact sheet (May 2011)*, 2011). According to the Commission on Aging, it is home to one million baby-boomers (those born between 1946 and 1964) who have just begun to turn 65 and who constitute approximately one third of the state's population. From 2006 to 2030, Connecticut's older adult population is expected to increase by 64% (Migneault, 2013). In this study, factors which promote or hinder referrals to social service agencies will be identified. This will include the state's Gatekeeper Program, which is intended to help older adults remain safely at home.

According to the Commission on Aging, 80% of Connecticut's adults want to age in their homes and communities (Migneault, 2013). This is supported by both the Supreme Court Olmstead decision and Connecticut state law, under which people have the right to choose and receive care in the least restrictive environment. Aging in place has been defined by the Centers for Disease Control and Prevention as the "ability to live in one's own home and community

safely, independently, and comfortably, regardless of age, income, or ability level” (“Healthy places terminology – Aging in place”, n.d., p.1) even with the prospect of increasing need for support because of declining health, loss of a spouse and/or declining income (Pastalan, 1990). Connecticut legislators had sufficient concern over issues related to aging in place to convene a taskforce in 2012 to study a range of related issues and offer solutions (Task Force to Study Aging in Place, 2013). About one third of older adults living in the community face functional limitations that place them at risk for not being able to age in place (Fuller-Thomson, Yu, Nuru-Jeter, Guralnik, & Minkler, 2009). In order to help them age in place successfully, access to supportive community resources is needed.

A criticism that has been made repeatedly about many of our current systems of support for older adults is that they are difficult to access by those who need them most – older adults with more severe problems (Florio & Raschko, 1998; Raschko, 1990 a; Raschko, 1990 b). As a result, the aging system has served primarily higher functioning, older adults, and those who have positive family and social support systems. A program that addressed the problem of access through improving the referral process was developed in Spokane, Washington in 1978 (Florio & Raschko, 1998). The program attempted to identify at-risk older adults with mental health issues before their needs became acute. In addition to accepting referrals through normal professional community channels, such as physicians, hospitals, and area agencies on aging, people who had interactions with the elderly but who were not mental health professionals were added to the referral network. This was done by involving and educating people whose jobs brought them in contact with older adults on a regular basis, such as postal workers and beauticians, about mental health issues and the elderly. This program, named the “Gatekeeper

Program,” opened the gate between those who needed help and those who would “see” the need and refer the elderly person to the resources at the Community Mental Health Center (Smith, Buckwalter, McDonald, & Van Hoozer, 1989). As a result, 40% of referrals to the mental health agency came from these non-professional community people “Gatekeepers,” and 60% from professionals. Mobilizing these non-professional Gatekeepers offered an extra measure of security for aging seniors, helping to insure that “aging in place” did not become a case of “failing in place.” The program spread to other states and even internationally and has been modified in the process (*Castlegar Gatekeeper Program Training Manual*, 2006; *Gatekeeper Manual*, 2011; Barrett, Secic, & Borowske, 2010; Bartsch & Rodgers, 2009; Fienga, 2013; “Greene County senior outreach and referral (SOAR),” n.d.; “Gatekeeper program,” n.d.). The actual implementation and name varies; for example, the Colorado program is known as Senior Reach (Bartsch, D. A., & Rodgers, V. K., 2009). Connecticut began the first state-wide Gatekeeper program in the U.S. in September 2011.

For the Gatekeeper Program or any public awareness/prosocial action program to work, two essential elements are required: awareness and action. Awareness means knowing that the program exists and how to make a referral to it, knowledge that can be provided through traditional social marketing efforts. The second element, action, means that an actual referral is made. If factors relevant to the process of non-professionals’ referrals for the Gatekeeper Program are identified (the specific goal of this research), then this knowledge may be used to better target potential Gatekeepers and/or tailor the program to improve the probability of referral. In addition this knowledge could be extrapolated to other such “do the right thing” efforts (the broader goal of this research). Identifying the elements which enhance the likelihood

of triggering a particular prosocial behavior, in this case making a referral to the Gatekeeper Program, is valuable. The literature is barren concerning factors which may promote direct or indirect referring behaviors. It is assumed that professionals, such as social workers, if aware of a program which will benefit their clients, will avail themselves of it as part of their professional activities. What is important, and the target of this research, is understanding and cultivating referral activities by non-professionals who are in contact with a target population, such as older adults.

Chapter 2: Literature Review

Introduction

This first part of this chapter reviews the literature on altruism, social responsibility and prosocial behavior, concepts which have been used to operationalize the action of individuals on behalf of other individuals or society as a whole; and social marketing, the commercial intervention that tries to shape public behavior for the good. The review continues with an examination of the needs of the vulnerable elderly and the necessity of providing support for “aging in place.” The Gatekeeper Program’s history and implementation as a solution to meeting these needs is then described. The Bystander Effect, which describes the actions of people present when an emergency unfolds, is reviewed for any insight it might provide on the phenomenon of people taking action when someone is in need. The Theory of Planned Behavior is examined as a model for understanding the behavior of making referrals to social service agencies. The significance and rationale for the research is then presented. Finally, research hypotheses informed by the literature are proposed.

Conceptual and Theoretical Framework

Altruism, Social Responsibility and Prosocial Behavior – “Do the Right Thing”

One of the broadest and most philosophic concepts regarding helping or prosocial behaviors is that of altruism. The Oxford English Dictionary defines it as “the belief in or practice of disinterested and selfless concern for the well-being of others” (“Oxford dictionaries – altruism,” n.d.). The topic has and continues to foster philosophic speculation in social science literature (Frohlich & Oppenheimer, 1984; Hay, 2009) where it remains rather broadly defined. Macaulay and Berkowitz (1970), in their introduction define it as “behavior carried out to

benefit another without anticipation of rewards from external sources” (p. 3). Even so loosely defined, there are a number of studies seeking to identify its place variously as an innate or learned social behavior (Johnson, Danko, Darvill, & Bochner, 1989; Macaulay & Berkowitz, 1970; Mattis et al., 2009; Rushton, 1982), a personality trait (Batson, Bolen, Cross, & Neuringer-Benefiel, 1986; Bierhoff & Rohmann, 2004; Burks, Youll, & Durtschi, 2012; Rushton, Chrisjohn, & Fekken, 1981), or even to link it to genetic factors (Rushton, 1984, 1989). Narrowing the field a little, the frequently associated concept of “social responsibility” seems a little less philosophic and value-laden, and yet still sits under that broad umbrella. A recent article in the *Journal of Evolutionary Psychology* places prosocial behavior in the altruism niche (Oda, Hiraishi, Fukukawa, & Matsumoto-Oda, 2011).

Social responsibility has been researched for decades (Harris, 1957; Kraft & Jauch, 1992; Oliner, 2005; Singhapakdi, Vitell, Rallapalli, & Kraft, 1996), and social responsibility as a measurable personality trait has been investigated as long (Berkowitz & Lutterman, 1968; Bierhoff, 2000; Gough, McClosky, & Meehl, 1952; Harris, 1957). One of the concerns when using “social responsibility” is simply that it may be so inclusive that it fails to capture the behavior in a meaningful way. Berkowitz and Daniels (1964) refined a scale to measure social responsibility, bringing it from 44 to 22 items. The range of behaviors assessed is very broad, and even a casual observer might wonder whether a question related to cheating (“Cheating on examinations is not so bad as long as nobody ever knows,” p. 279) or finishing something (“It is always important to finish anything that you have started”) is related to social responsibility. It is this broad interpretation, with a hint of moral judgment, which leads many to prefer the more neutral term “prosocial behavior.”

The term “prosocial behavior” suggests something which can be externally observed, a behavior. As such, it is relatively easy to operationalize, and has been usefully employed to study a wide range of activities. These include common concerns of the social sciences such as education and children’s behavior (Leaf et al., 2009; Lewis & Sugai, 1996; Perren, Stadelmann, Von Wyl, & Von Klitzing, 2007), criminal justice systems (Ahmed, 2008), and health (Rice, Milburn, & Rotheram-Borus, 2007). Other areas to which it has been applied are as diverse as market economics and corporate responsibility (Rosenbaum, Billinger, Stieglitz, Djumanov, & Atykhanov, 2012; van Aaken, Splitter, & Seidl, 2013), and biological and life science (Bartal, Decety, & Mason, 2011; Bartal, 2012; Bartal, Rodgers, Sarria, Decety, & Mason, 2014; Lukas et al., 2011; Rushton, 2004). It has even been used to help explain why public service employees are more willing to work unpaid overtime (Gregg, Grout, Ratcliffe, Smith, & Windmeijer, 2011). There are many initiatives which attempt to engage community members in prosocial activity using public awareness campaigns such as many of the “Do the right thing” campaigns. The meme, “Do the right thing,” is pervasive in our culture, though pinning down its meaning tends to be very context sensitive. A recent electronic search of the literature with “Do the right thing” in the title turned up 265 articles covering everything from teaching a young hunter to kill game in a particular way to encouraging ethical behavior in MBA students through an MBA Oath (Heavey, 2005; Matthews, 2012). The concept has been applied widely, appearing in several English-speaking countries. The phrase has been used in Canada (Bogomolny, 2004; Taylor, 1998), the United Kingdom (Derbyshire, 2008), and Australia (Iliffe, 2002). The phrase as also appeared in several non-English-speaking countries such as the

Netherlands (Graff, 2002), Germany (Mangold, 2012), and even China's national English-language weekly newspaper ("Do the right thing," 2012).

The phrase, although it appears to have broad application, has actually only been applied within a fairly limited set of domains, principally business, medicine, and politics. Business-related topics dominate the literature, possibly because there is no single clear code of conduct in business, which is rife with morally ambiguous situations where employees at all levels are forced to balance the profit-making nature of the business entity against personal, cultural and organizational values (Parker, 2007). The theme has appeared in engineering (Sampson, 2009) and information technology articles (Evans, 2004; Evans, 2005) as well.

The phrase has appeared in a number of medical articles dealing with topics as broad-ranging as over-prescription of antibiotics for upper-respiratory infections (Ebell, 2005), controlling hospital-associated infections (Morrissey, 2003), the failure of physicians to observe proper hygiene in an obstetrics ward (French, 2012) and the sensitive area of fetal pain in relationship to the practice of abortion (Derbyshire, 2008). Because physicians, nurses, and pharmacists all have oaths, codes of ethics, and numerous laws regarding patient care it may not be so surprising that the medical profession as a whole has not employed the phrase more frequently.

Despite the relatively widespread use of the term, it is difficult to pin down exactly what is meant. Literature searches for a definition of "do the right thing" or "doing the right thing" using the phrase and keywords "defined" or "definition" were not successful. Numerous articles addressed encouraging particular desired behaviors, such as quality improvement in medicine (Wynia, 2012), inculcating values in children (Swift, 2010), reducing the risk of biological

invasion by creating incentives for pet sellers and owners (Perry & Farmer, 2011) or even making people on welfare do the right thing through forced income management to insure that their daily needs are met (Swift, 2010). In short, while the idea is ubiquitous, it is not clearly defined and therefore difficult to operationalize.

There seems generally to be a sense that in some, if not most, situations there is a course or range of actions which should be taken by individuals who are aware of the situation. For example, most people would be expected to react to the sight of a stranger who appears to be injured; the individual responses might be different such as: approach the person, call 9-1-1, or try to get someone else to help. All of these actions would be construed as an attempt to do the “right thing.” The point is that there is a shared social norm of doing the right thing. In addition there have been efforts to inculcate a broader sense of urgency to take action, such as in school-age children (Bloom, 2004; Corum, 2004). Certain types of education, such as that provided through a police academy, are believed to promote prosocial behavior (Ahmed, 2008), Organized efforts that try to link general prosocial tendencies broadly to “Do the right thing” and more narrowly to specific actions often use social marketing and as such social marketing is relevant to this research.

Social Marketing

The use of commercial marketing techniques, such as advertising, to try to shape public behavior is nothing new. Going back half a century, the Advertising Council of America conducted campaigns for social objectives, including “Smokey the Bear,” “Keep America Beautiful,” “Join the Peace Corps “and “Buy Bonds” (Kotler & Zaltman, 1971). Kotler and Zaltman are believed to be the first to label this sort of activity “social marketing” (Dann, 2010).

They defined it as “the design, implementation, and control of programs calculated to influence the acceptability of social ideas and involving considerations of product planning, pricing, communication, distribution and marketing research” (Kotler & Zaltman, 1971, p. 5). Marketing in the broad sense is dedicated to understanding and changing human behavior; and offers the potential to help mitigate some of the ills associated with life-style choices which can lead to cancer, heart-disease, obesity-related illness, and HIV/AIDS (Hastings & Saren, 2003). More recently the phrase “social marketing” has been applied to a range of efforts, mostly in the public health sector, to encourage people to undertake specific behaviors, such as dietary changes, obtaining vaccinations, and refraining from smoking (Cates, Diehl, Crandell, & Coyne-Beasley, 2014; Ip et al., 2014; Keller et al., 2014; Rekhy & McConchie, 2014). Stead, Gordon, Angus, and McDermott (2007) reviewed 54 interventions based on social marketing and concluded that there was evidence that adopting social marketing principles could be effective across a range of behaviors, with different target groups, in different settings, and that it could influence policy, professional practice and individuals.

Identifying a more current definition for “social marketing” is a difficult task. Dann (2010) recently found that forty years of research in the field had produced forty-five peer-reviewed academic definitions of social marketing. Dann notes that the definition is English language-centric in that it builds specifically on English-language literature, and that further research is necessary for a more global definition. Dann defines social marketing as:

the adaptation and adoption of commercial marketing activities, institutions and processes as a means to induce behavioral change in a targeted audience on a temporary or permanent basis to achieve a social goal. It is the use of skills and techniques

developed for use in the commercial sector to accomplish socially-beneficial aims (p. 151).

The key element in both definitions is that skills and techniques developed in the commercial sector are to be employed to accomplish socially desirable goals. Such practices include the traditional four Ps of marketing; product, place, price, promotion, plus a fifth P unique to some social marketing – partnerships (Henley et al., 2011). Henley, et al., explain these components in the context of a campaign to reduce childhood obesity in France, “Ensemble, Prévenons l’Obésité Des Enfants” (EPODE) or “Together, let’s prevent childhood obesity.” In social marketing, the products are primarily ideas such as eating two fruits and five vegetables a day to be healthy (even though in this case the food is tangible). The core social product is identified as the underlying benefit of being healthy. Place (or “distribution”) in marketing usually involves how to make the product conveniently available; and any necessary management of intermediaries. In the case of EPODE, products were made available through school cafeterias and vending machines; intermediaries included health professionals, teachers and coaches.

In other common social marketing campaigns, as with the Connecticut Gatekeeper Program, “place” may be an 800-number through which information (the product) may be obtained. Both the monetary and non-monetary cost of the product constitutes the “price.” Price is part of the concept of ‘exchange’ where the buyer gives up something in return for the product. In addressing childhood obesity, the target audience is being asked to give up the instant gratification of desired foods and soft drinks or to engage in effortful activities (price) in order to achieve better health. Promotion encompasses the range of activities that create awareness of the product (or idea), or it may serve as a reminder that the product exists. It

attempts to increase awareness of the product's benefits and persuade the buyer to make the purchase. Promotional tools may include traditional advertising, personal selling, sales promotion and public relations. In the case of the EPODE program, it was advertised locally, and personal selling was implemented through the efforts of doctors and other influential community members to influence children and parents to follow the program. "Sales promotion" is carried forward by events designed to capture the public's awareness, and public relations uses techniques like regular press releases to help maintain public awareness and positive perception about the social marketing campaign. In the context of childhood obesity, "partnerships" is a fifth essential marketing mix element as there are numerous stakeholders and the problem is so embedded in a matrix of social and economic forces.

Campaigns mentioned previously are examples of current social marketing, where the product (a social benefit) is promoted through public education such as advertising and public presentations (place), emphasizing the low price (a small effort on the part of the individual). Seatbelt use is encouraged by the "Click it or Ticket" campaign (a public safety product) through advertising (promotion) emphasizing the cost of not complying ("NCDOT initiatives: Click it or ticket," n.d.). The SeeClickFix campaign encourages using a mobile phone to report potholes (a benefit to the public) at a low cost (a phone click) ("About SeeClickFix," n.d.). The Homeland Security public safety campaign, "If you see something, say something," encourages people to report something suspicious (a public safety benefit) at a low cost ("saying something") ("If you see something, say something" campaign', n.d.). Connecticut's Gatekeeper Program uses the slogan "Do you see a senior in need?" to promote the making of a referral to a social service agency (through public education and presentations) at a low cost (a

phone call) which may result in significant social benefit (identification of an older adult in difficulty) (*Do you see a senior in need?*, 2012).

Social marketing is now global in practice. Social marketing campaigns are ubiquitous in the English-speaking world and have been recently reported in places as disparate as Greece (Polyzoidis, 2013), China (Ip et al., 2014; Sun, Guo, Wang, & Sun, 2007), Pakistan (Samad, Nwankwo, & Gbadamosi, 2010), Mexico (Thrasher et al., 2011), and Uruguay (Medina, 2014). Social marketing appears to be widely employed in public health campaigns aimed at major concerns such as nutrition and obesity (Glasson et al., 2013; Henley et al., 2011; Newton, Newton, Turk, & Ewing, 2013; Nothwehr, Snetselaar, Dawson, & Schultz, 2013; Rekhy & McConchie, 2014; Sun et al., 2007; Watson & Wyness, 2013; Wells, Wyness, & Coe, 2013), sexual behavior (Cates et al., 2014; Frazee, Rivera-Trudeau, & McElroy, 2007; Messer, Shoe, Canady, Sheppard, & Vincus, 2011; Samad et al., 2010), tobacco cessation (Ip et al., 2014; Thrasher et al., 2011), and alcohol abuse (Cismaru, Lavack, & Markewich, 2009; Janssen, Meriam M. Mathijssen, van Bon-Martens, van Oers, Garretsen, & Henk., 2013; Szmigin, Bengry-Howell, Griffin, Hackley, & Mistral, 2011). Social marketing has been used to support drug recovery efforts (Albert, 2012) and to de-stigmatize recovering addicts (Lavack, 2007). These campaigns are typically aimed at trying to change the behavior of individuals for their own benefit. Other areas where social marketing has also been successfully employed to encourage prosocial behavior are improved HIV screening (Frazee et al., 2007), natural resource conservation (Bowerman & DeLorme, 2014; López-Mosquera, García, & Barrena, 2014), reduction of inappropriate school-bus behavior (Rinaldi, 2009), and other select health-related concerns as drunk driving reduction (Cismaru et al., 2009), HPV vaccination promotion (Cates

et al., 2014) and use of contraceptives (Samad et al., 2010). Zanjani, Kruger, and Murray (2012) described the mixed results of a social marketing campaign to improve public awareness concerning mental health and aging. Clearly social marketing practices are adaptable to a wide range of concerns, such as the prosocial behavior of identifying and assisting vulnerable older adults.

Identifying and Assisting the Vulnerable Elderly

The problem of access to services for the elderly is persistent and pervasive, and has been recognized for decades. Health and social service agencies have not understood or appreciated the effort needed to identify and locate high-risk elderly (Knight, Reinhart, & Field, 1982). It has been known since the mid-1980's that older adults in serious difficulty usually get help because someone else gets it for them (Cohen, Teresi, & Holmes, 1985; O'Bryant, 1985; Suggs, Stephens, & Kivett, 1986). The very nature of some of the problems which the elderly face, such as depression and dementia, renders them incapable of seeking the help which they need. While there also may be many systemic problems which interfere with older adults accessing the services they need, one key factor is the resistance of this population to interventions, something which has been recognized since the 1970's (Cantor & Mayer, 1978). Rashko (1990a; 1990b) cited these issues, as well as the elderly's fear that they might be forced into an institution if their condition were to become known to professionals. Revisiting these issues eight years later Florio and Raschko (1998) noted that, in addition to the challenges posed by mental health issues, it is possible for an individual's support system to simply unravel through the death of a domestic partner or the relocation of family members to a distance. Other reasons cited for failing to obtain services include: that there may be a negative stigma

associated with using “social services”; pride and stoicism; shame, suspicion or fear; financial reasons; mental health issues such as paranoia, memory loss, and depression; and lack of information about what services are available or assistance they may qualify for (*Gatekeeper program training manual*, 2010).

A related approach to this problem uses the concept of the “frail” elderly, more commonly employed in Europe (Cramm & Nieboer, 2013; Gallucci, Ongaro, Amici, & Regini, 2009; Strandberg & Pitkälä, 2007). Gobbens, Luijckx, Wijnen-Sponselee, & Schols (2010) have proposed a rather abstract conceptual definition: “Frailty is a dynamic state affecting an individual who experiences losses in one or more domains of human functioning (physical, psychological, social), which is caused by the influence of a range of variables and which increases the risk of adverse outcomes” (p.342). Strandberg and Pitkälä (2007) offer a more concrete concept that frailty arises from “declines in the molecular, cellular, and physiological systems of the aged body” (p. 1328). They go on to explain that frail elderly people have reduced stress tolerance because of decreased reserves in their various physiological systems. Frailty is associated with increased health service utilization, which is seen as a problem due to constraints on healthcare expenditure and insufficient numbers of informal caregivers (Cramm & Nieboer, 2013). Similarly to the U.S., Strandberg and Pitkälä (2007) note that effective prevention and treatment requires recognizing those at risk and providing early intervention. Such early interventions may most likely be achieved in communities with a high degree of social cohesion or connectedness, a multi-dimensional construct which includes a psychological sense of community, attraction, and neighboring (Buckner, 1988; Wilkinson, 2007). Cramm &

& Nieboer (2013) found a strong relationship between frailty and social cohesion and belonging.

The premise of many public health and wellbeing programs is that earlier intervention results in fewer crises and better outcomes, which has been found to be true across a variety of special geriatric needs including nutrition, depression and dementia (Cabin & Fahs, 2011; Hay et al., 1998; Keller, 2004; Lyness, Yu, Tang, Tu, & Conwell, 2009; Meng, D'Arcy, Morgan, & Mousseau, 2013; Steinman, Steinman, & Steinman, 2003; Tierney et al., 2004; Zagaria, 2007).

There are some community efforts to improve the public's awareness of resources such as Connecticut's United Way which actively promotes an information and referral hot-line, 2-1-1. The top 10 requests for information from the 60-74 year old cohort are pragmatic inquiries about resources such as housing, food stamps, and financial assistance (*2-1-1 Connecticut: Top 30 service requests - age cohort 60-74 - period: 1/1/2012 - 12/31/2012*. 2013). Inquiries by the age 75-and-over cohort are similar with one notable exception: the third most common inquiry is regarding protective services for the elderly (*2-1-1 Connecticut: Top 30 service requests - age cohort 75 and over - period: 1/1/2012 - 12/31/2012*. 2013). Connecticut has a mandated reporting law (Elder abuse laws and mandated reporting – Connecticut, n.d.) requiring people in certain occupations, such as medical professionals and social workers, to report to the Connecticut Department of Social Services, Protective Services for the Elderly, within five days whenever there is reasonable cause to suspect or believe that someone age 60 or over has been abused, neglected, exploited, or abandoned, or is in need of protective services. While this program offers some protection to older adults, it is at best a service of last resort for older adults who are probably already experiencing serious difficulty. Encouragement of prosocial

behavior, such as a referral for social services, offers the possibility of earlier intervention and broadens the safety net for older adults, particularly those living alone. Factors which may affect or enhance such prosocial behavior are the subject of this research.

Gatekeeper Program

The need for outreach programs to the elderly was identified as early as 1963 (Knight et al., 1982), though the source of that information was not specified. The original Gatekeeper program was designed by Ray Raschko and Francie Coleman in 1978 (*Castlegar Gatekeeper Program Training Manual*, 2006). The need for the program arose from the failure of many of the elderly living alone to seek services for themselves, particularly those with mental health issues (Florio & Raschko, 1998; Raschko, 1990a; 1990b). The program began through an agreement between the Spokane Community Mental Health Center and the Eastern Washington Area Agency on Aging (Raschko, 1985). While there were other senior outreach programs underway in that era, Raschko's program was unique in relying on community "Gatekeepers."

Raschko identifies Gatekeepers as "non-traditional referral sources trained to identify and locate high-risk elderly living in the community ... They are corporations, businesses, and other organizations that have contact with the most isolated elderly in the community" (p. 461). There were 13 specific jobs identified as Gatekeepers:

meter readers, credit office workers, and repair personnel from the electrical and natural gas utility; residential property appraisers from the county assessor's office; apartment and mobile home court managers; postal carriers and postal workers; water meter readers from the City of Spokane; fuel oil dealers; police and sheriff's departments; fire

departments; grocery stores, especially those that deliver groceries; and ambulance companies (p. 461)

People in these jobs came into contact with older adults regularly, but it was not their exclusive job to serve them. Because they were in regular contact with older adults, it was thought that using them as referral sources would help provide earlier identification of problems and improve access to behavioral health care in Spokane. The program was very successful; the elderly comprised 21% of those served by the Spokane Mental Health Center in 1989 versus only 4% in 1978, and still only 4% at community health centers nationally (Raschko, 1990b).

This program provided multidisciplinary in-home assessment and direct in-home services, including medical and housekeeping, through a group of agencies. The initial effort was well-funded and provided a comprehensive health-care team. There were 11 case managers trained as generalists who carried primary case responsibility; one pharmacist/case manager; three field supervisors, two of whom were registered nurses; one part-time psychiatrist who provided 11 hours of in-home evaluation and treatment weekly; medical residents from the University of Washington who provided four hours a week of in-home service; care was coordinated by a social worker with a Master's degree (Raschko, 1985). It was use of such a comprehensive team which was later to be identified as the medical model for Gatekeeper programs.

Less than 1% of those served were self-referred, underscoring the need for additional referral sources such as the Gatekeeper Program (Raschko, 1990b). Over one 18-month period, 40% were referred through the prosocial behavior of such community Gatekeepers (Florio et al., 1996). Another study of the program concluded that the Gatekeepers found a unique population

of community-dwelling older adults who were not found by more traditional referral services as they were more likely to live alone and be socially isolated (Florio & Raschko, 1998).

While it was not a specific goal of the program, independent studies of suicide rates among older Americans living in Washington State showed a steady decline in Spokane County over the next ten years, while rates for similar older persons living in other counties climbed (Developmental history of QPR, 2011). Paul Quinnett, who worked for the Spokane Mental Health Department, adapted the Gatekeeper model to suicide prevention in 1995. It is called the QPR program, for Question-Persuade-Refer, and relies, like Raschko's program, on the training of community "gatekeepers," based on the concept that those most at risk for self-destruction tend not to self-refer. Spokane Mental Health helped underwrite research and development of the QPR concept and later, the QPRT Suicide Risk Assessment Inventory. In 1999, due to budget cuts at Spokane Mental Health, the QPR Institute was founded to continue the work. The program has gone on to become very successful in its own right. The Institute estimated that by the end of 2009, some one million American citizens had been trained in QPR by Certified QPR Instructors ("What is QPR?," 2011). Because the program relies heavily on the concept of community "gatekeepers," it is frequently also called a Gatekeeper Program, which may lead to confusion as to which program has been implemented. Suicide prevention programs identified solely as Gatekeeper and not QPR programs were recently identified in ten states scattered across the U.S. from Alaska to Maine ("Gatekeeper Suicide Prevention Training," n.d.a; "Gatekeeper Suicide Prevention Training," n.d.b; "Gatekeeper Training," n.d.a; "Gatekeeper Training," n.d.b; "Gatekeeper Training," n.d.c; "Maine Suicide Prevention Program - Gatekeeper Information," n.d.; "New online PD! Act 770 of 2011: Gatekeepers - Youth Suicide

Prevention Awareness,” n.d.; “Suicide prevention - call a Gatekeeper,” n.d.; “Suicide Prevention,” n.d.; “Suicide Prevention Training For Community Members (Gatekeepers),” n.d.; “UW Gatekeepers Training Emphasizes Suicide Prevention,” n.d.). The name “gatekeeper” appears to be now in use somewhat generically for a person who may refer for services. In a recent outcome study of a public awareness campaign concerning mental health and aging, Family Consumer Science Extension Agents in rural Kentucky identified as “gatekeepers” were trained in identifying mental health and substance abuse issues and charged with communicating that knowledge to the community (Zanjani et al., 2012).

The Gatekeeper Program has received numerous national awards (Elder Services, n.d.) including the Ford Foundation’s Innovations in Psychiatry award (“Developmental history of QPR,” 2011) and is cited by the Substance Abuse and Mental Health Services Administration of the Department of Health and Human Services (SAMHSA) as an example of “Evidence-based Practice Models/Programs of Older Adult Behavioral Health” (*Grants to Enhance Older Adult Behavioral Health Services*, 2011). According to the Low-Income Home Energy Assistance Program (“Energy and the low-income elderly - A survey of needs and programs,” 1995) by 1995 more than 200 utilities in 40 states had adopted the Gatekeeper program. Few of those programs are still in existence, as the deployment of automated meter reading technology virtually eliminated the job of meter readers. Despite the widespread implementation of the program, only two outcome studies other than Spokane could be identified. A program modeled on the Spokane Gatekeeper Program implemented in a five-county area of Colorado (*Castlegar Gatekeeper Program Training Manual*, 2006; *Gatekeeper Manual*, 2011; Barrett et al., 2010; Bartsch & Rodgers, 2009; Fienga, 2013; “Greene County senior outreach and referral (SOAR),”

n.d.;” Gatekeeper Program,” n.d.) had the same proportion of referrals from non-traditional community sources as that in Spokane, 41%. Southwest General Hospital, located in a suburb of Cleveland, implemented the program (Barrett et al., 2010), and found that it was cost effective and that there was a statistically significant decrease in Emergency Department visits and hospital admissions for the older adults served by the program. The Spokane Gatekeeper Program was successful at reaching older adults of color whereas the Southwest General Hospital was not.

Several attempts to establish the Gatekeeper Program in Connecticut were made beginning on Dec. 6, 1993, when a coalition of public and private organizations in Norwich met to consider ways to identify older adults who were at risk. The group considered two approaches; one was to model the Gatekeeper Program in Spokane. Wallet size information cards were developed and distributed in conjunction with a one-hour training program for utility workers. In Meriden, Connecticut, postal workers and oil-delivery personnel were also recruited for this program, designated as a Gatekeeper program. No further information concerning the success or cessation of this program could be found. In 2000, the Guilford Interfaith Ministry made identifying older adults living alone a priority for intervention and prevention services if they were identified to be at risk, following a local incident when an elderly woman living alone died and was not discovered for several weeks. The group obtained a grant from a local foundation which was used to produce a video in support of the program. The Guilford Gatekeeper program spurred the creation of other Gatekeeper programs in a number of other communities, including Middletown, Connecticut. All of the programs eventually lost financial and institutional support and were ended within a few years. In 2009, St. Luke’s Eldercare

Services (now St. Luke's Community Services) a small not-for-profit agency in Middletown, Connecticut, sponsored a symposium on the unmet behavioral health needs of seniors living in Middlesex County. One suggestion which arose at the symposium was to implement the Gatekeeper Program. At that time, there were no longer any viable Gatekeeper Programs in Connecticut, but a copy of the Guilford Interfaith Ministry's video was obtained along with permission to use it, and the program was piloted locally. Like the Gatekeeper Program in Spokane, this program enlisted both community workers whose jobs brought them in contact with seniors and community members to act as additional eyes and ears in the community to identify at-risk older adults. The following year grants from the Middlesex United Way and Senior Resources, the local Area Agency on Aging, permitted St. Luke's to expand the program to surrounding towns. The success of that program in turn led the Connecticut Department of Mental Health and Addiction Services to fund the Gatekeeper Program statewide through competitive grants to four mental health agencies covering its five provider areas. Connecticut is believed to be the first state to have a fully implemented statewide Gatekeeper Program, which officially started in September 2011. In the first year, 215 referrals were made to the four agencies; 54 (25%) were high risk, resulting in referrals to either Protective Services for the Elderly or the Connecticut Home Care Program for the Elderly, a nursing-home diversion program. Unlike the Spokane and Colorado programs which had about 60% of its referrals from professionals, only about 40% were from professionals who work with older adults, and the balance were from people whose occupations brought them in contact with older adults or other community members. The Connecticut program does not follow the medical mental health model originated in Spokane, but rather attempts to provide assistance through social work case

management, a lower cost model which provides information and referral to other available community resources. This model may be characterized as the social work version of the Gatekeeper Program, which has been introduced in other areas as well (Castlegar Gatekeeper Program Training Manual, 2006; Gatekeeper manual, 2011; O'Hare, B., 2014).

Bystander Effect

Whereas the success of the Gatekeeper Program depends on the willingness of people to act for the benefit of others, the Bystander Effect addresses the opposite of prosocial behavior: doing nothing when action should be taken. The emphasis of the Bystander Effect is on the failure to act, and is examined here for insight to factors which might inhibit prosocial behavior. The term, Bystander Effect, was coined in March of 1964 when a journalist wrote a sensational article about a murder two weeks previous ("Queens woman is stabbed to death in front of home," 1964) which allegedly had 38 witnesses, none of whom called the police while the crime was in progress.

Though this particular account of the incident was later discredited, the notion that people could be aware of a horrendous incident and not take action served as an icon of social psychology, an antonym to the parable of the Good Samaritan (Manning, Levine, & Collins, 2007). The question was how people could fail to respond to the needs of others in the face of apparent emergencies, which led to increased attention to the phenomenon of people observing someone in difficulty but not helping, the Bystander Effect (Latané & Darley, 1970). A review of more than 50 studies concluded that the Bystander Effect withstood the tests of time and replication as a valid concept (Latané & Nida, 1981). On the flip side, 40 years of such studies were reviewed and it was concluded that in certain cases, the effect could be reversed (Fischer,

Greitemeyer, Pollozek, & Frey, 2006). The Bystander Effect was less pronounced in situations perceived to pose a danger to someone else, in males, and in situations which involved friends rather than strangers (who were more likely to stand by). Further, specific conditions increased helping behaviors, such as real and spontaneous communication between bystanders or when group identity was salient (Levine & Crowther, 2008), there was the possibility of future interaction among bystanders (Gottlieb & Carver, 1980) or a sense of cohesiveness (Rutkowski, Gruder, & Romer, 1983). Of the range of typical demographic variables which might have an effect (gender, age, race, education, rurality) gender and rurality (a possible factor in future social interactions) were identified (Gottlieb & Carver, 1980; Levine & Crowther, 2008; Rutkowski, Gruder, & Romer, 1983; Stalder, 2008).

It was proposed in Chapter 1 that For the Gatekeeper Program or any public awareness/prosocial action program to work, two essential elements were required: awareness and action. In studies of the Bystander Effect, Latané and Darley (1970) proposed that there are in fact five steps which increase the likelihood of intervention. These are: 1) notice the event; 2) interpret the event as an emergency; 3) accept responsibility for the situation; 4) know what intervention to implement; 5) take action. Anker and Feeley (2011) used the Bystander Effect model to understand better how to improve the likelihood of prosocial behaviors such as organ donation or conservation participation. One study specifically addressed severity of need, and it did so in the context of number of bystanders (Fischer et al., 2006). The results indicated that in situations with high potential danger to a victim, participants confronted with an emergency whether alone or in the presence of another bystander, were similarly likely to help the victim. This contradicts earlier findings which suggested that the presence of additional bystanders

inhibited helping behaviors (Darley & Latané, 1968; Latané & Darley, 1968, 1969; 1970). This finding raises the question of seriousness of need on triggering helping behavior and was addressed as part of this study.

The five steps in the Bystander Effect model appear to be addressed by the Connecticut Gatekeeper Program. Gatekeeper recruits are encouraged to: 1) notice the need for intervention, such as newspapers piling up on someone's porch. 2) If they observe such an event they are urged to perceive the event as requiring action. 3) They are encouraged to accept personal responsibility for the situation (Anker & Feeley, 2011). Gatekeeper training emphasizes that we are all members of the same community, promoting cohesiveness which in turn lessens Bystander Effect (Rutkowski et al., 1983). 4) Gatekeepers in Connecticut are educated to know what intervention to implement, that is, to make a referral to the agency associated with their geographic area, and that the action is differentiated from that of a true emergency which should result in a call to 9-1-1. 5) Finally, Gatekeepers are urged to take action if the situation arises that they see a "senior in need." In summary, the Bystander Effect model identifies steps 1-4 in the sequence of helping behavior which are addressed through training in the Connecticut program. The last step, taking action to make a referral, is presented as a logical outcome of the four previous steps. However, not everyone who receives Gatekeeper training goes on to make a referral. While the Bystander Effect identifies a series of steps leading to action and suggests factors which may affect it, it offers limited theoretical insight into the actual triggers for the activity.

A Theory of Planned Behavior

The Theory of Planned Behavior does offer a model which predicts specific behavior. It grew out of the Theory of Reasoned Action (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975) which was based on the assumption that most socially relevant actions are volitional; a person's intention to perform an act is the immediate determinant of the action. Barring unforeseen events, a person can usually be expected to act in accord with the intention. The theory assumes that people are rational and use available information systematically and was "born largely out of frustration with traditional attitude-behavior research, much of which found weak correlations between attitude measures and performance of volitional behaviors" (Hale, Householder, & Greene, 2003, p.259). Success in executing an intended behavior also depends on non-motivational factors such as availability of necessary opportunities and resources (Ajzen, 1988; Ajzen, 1991); an intention to drive to the store may be thwarted by mechanical difficulty with one's car. Ajzen proposed viewing control over behavior as occurring on a continuum, one end of which is anchored by activities that encounter few problems of control, the other end by things over which we have little control. Accordingly, the Theory of Planned Behavior's three conceptually independent determinants of intention are: 1) the attitude toward the behavior; 2) the subjective norm, and 3) the degree of perceived behavioral control. The Theory of Planned Behavior proposes that the intention to perform specific behaviors can be predicted with high accuracy based on these three concepts (Ajzen, 1988; Ajzen & Madden, 1986; Schifter & Ajzen, 1985). The model is illustrated in Figure 1.

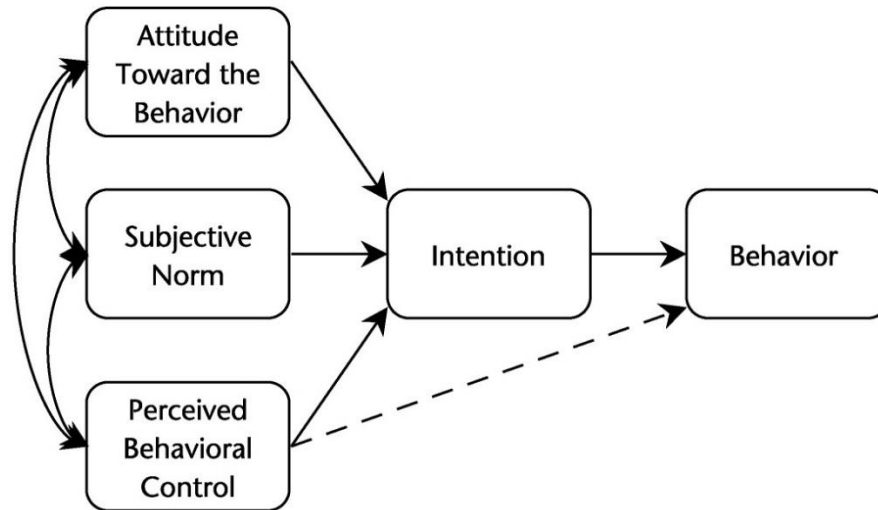


Figure 1. The Theory of Planned Behavior.

Ajzen, I. (2005). *Attitudes, personality and behavior*. 2nd Edition. © The Dorsey Press.

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The first concept, the attitude toward the behavior, is self-explanatory: it refers to the evaluation of the behavior in question. If a person has a negative attitude toward the behavior in question, such as injecting drugs like heroin, it is less likely that the behavior will take place. Conversely, if a person has a positive attitude toward a particular behavior, such as receiving a flu vaccination, the behavior is more likely to take place. The theory recognizes the influence of other possible variables on attitude, which may be independently assessed, but are still considered to be part of the attitude concept.

The second concept, the subjective norm, refers to the perceived social pressure to execute the activity. If a person has friends who inject heroin on a regular basis, then the subjective norm will be more favorable toward such behavior. Conversely, if a person

associates or identifies with those who reject the use of even legal drugs, the likelihood that s/he would inject heroin is greatly reduced.

The third concept, perceived behavior control, is a measure of perceived ease or difficulty of performing the behavior. Performing most behaviors requires the availability of opportunities and resources, such as money, time, skills, or the cooperation of others. This constitutes actual behavioral control. However, even though actual behavioral control is present, perception may further influence the behavior. For example, even though two people might have actual behavioral control over an intention to learn to ski (money, time, and a nearby ski resort), the person who believes that s/he can master the sport is more likely to persist than someone who believes that s/he doesn't have the necessary physical skills. This antecedent of intention is assumed to be influenced by past experience as well as known resources and anticipated challenges and may be influenced by extrinsic variables such as an institutional policy or law.

It is important to note that intention to perform an action is a mediating variable and that in many cases the dependent variable of interest is in fact the performance of a particular action. However, it may be impractical for any number of reasons to make actual performance of an action the dependent variable in research, in which case the intention to perform the action may serve as a proxy for taking action and used as a dependent variable.

The steps identified by the research on the Bystander Effect which lead to increased likelihood of intervention support the Theory of Planned Behavior: Step 1) noticing the need for intervention; Step 2), treating the event as something requiring action, are part of perceived behavioral control; and Step 3) encouraging acceptance of personal responsibility for the

situation, is part of the subjective norms. Emphasizing that we are all members of the same community, promoting cohesiveness, is also part of the subjective norms. Step 4) to know what intervention to implement, is part of perceived behavioral control. The fifth step is the action itself. Attitude toward the behavior, part of the Theory of Planned Behavior, is not addressed by the Bystander Effect model. Thus, the two theories that undergird this research are highly congruent with each other.

The Theory of Planned Behavior has had some criticism. One (Terry & O'Leary, 1995) suggested that external factors that interfere with the performance of a behavior affect perceived behavioral control, whereas internal control factors affect self-efficacy expectations, an additional factor to the three proposed by Ajzen. Ajzen responded that these constructs were the same and proposed a model in which perceived behavioral control is influenced by both self-efficacy and controllability, a wider perspective than originally offered (Ajzen, 2002). A broader-based challenge to all purposive-action theories was offered by Pescosolido (1992) who presents a more socially oriented model for understanding activity, though she did not single out Ajzen's Theory of Planned Behavior. She noted that "by focusing on individuals and their purposive action, we remove, almost without recognition, the embeddedness of problems and their solutions in the social network" (p. 1101), though she grants that these approaches remain a useful way of slicing through a problem.

The Theory of Planned Behavior has been used to describe a wide variety of behaviors, from recreation to interpersonal interactions, and including physical and behavioral health activities (Ajzen & Manstead, 2007; Hrubes, Ajzen, & Daigle, 2001; Stecker, Fortney, Hamilton, Sherbourne, & Ajzen, 2010). In discussing models of human social behavior and

their applicability to health psychology, Ajzen (1998) argues persuasively for a content-free approach to health models, which allows broader application and theoretical oversight (Hagger & Chatzisarantis, 2009). The alternative, a content-specific model such as the health belief model (Becker & Maiman, 1975; Rosenstock, 1966) requires construction of a different model for every domain of human behavior of interest. Content free models, such as the Theory of Planned Behavior, are more parsimonious, identifying a small set of constructs that can be applied across behavioral domains such as a range of health concerns.

In the public health area, the theory has been applied to adolescents' condom use (Reinecke, Ajzen, & Schmidt, 1996) and weight-loss (Schifter & Ajzen, 1985). Of particular interest to social workers, the Theory of Planned Behavior has been applied to behavioral health issues such as Iraq veterans seeking mental health treatment (Stecker et al., 2010) and the provision of advice by sport coaches to students to seek help from mental health professionals (Mazzer & Rickwood, 2009). The theory has been applied to a number of areas of interest to social work including community and behavioral health. A meta-analysis of the Theory of Planned Behavior based on 185 independent studies concluded that the theory was capable of explaining 20% of the variance in prospective measures of actual behavior, which corresponds to a medium to large effect size (Armitage & Conner, 2001). Applying the Theory of Planned Behavior, as informed by the Bystander Effect to a study of the Gatekeeper Program could provide additional insight into factors affecting the socially desirable and valuable behaviors generally of referring older adults to social service programs.

Significance and Justification

The elderly constitute a vulnerable population; social workers are mandated under the National Association of Social Workers Code of Ethics to act protectively on behalf of the vulnerable (NASW Code of Ethics, 2008). Thus, a study which identifies factors related to a non-professional community Gatekeeper's intention to refer effectively promotes the welfare of a vulnerable population.

From a scholarly perspective, the Theory of Planned Behavior has proven useful in understanding and promoting health related behaviors. However, only one study has used the Theory of Planned Behavior for referring behaviors (Mazzer & Rickwood, 2009). The current study extends use of the Theory of Planned Behavior to identifying factors related to referrals to the Gatekeeper program by non-professionals, particularly elderly non-professionals. Lessons learned can be applied to other prosocial efforts as well.

Research Questions and Related Hypotheses

This study addresses prosocial behaviors in general by examining the process of intending to make a referral to social service programs for the elderly in particular. The fundamental research question is whether there are differences in the three elements of the Theory of Planned Behavior (attitude toward the behavior, subjective norms, and perceived behavioral control) in comparable general non-professional community members versus those who have made referrals. There are about 200 referrals a year total to the Gatekeeper Program in Connecticut. About 50 (25%) referrals are from family members, friends and neighbors of the people who are referred plus people who do not deal specifically with seniors as part of their job, such as postal workers and handymen, all of whom are identified by Raschko as

“Gatekeepers” . These 50 Gatekeeper referrals come from Connecticut’s adult population of 2.78 million (Town profiles - State of Connecticut - CERC regional profile 2012. 2012), a ratio of only about one referral for every 56,000 adults. In order to statistically test whether the Social Service Agency Referral Scale, developed for this study, correctly predicted increased referrals, it would be ideal to administer training and the Social Service Agency Referral Scale to all Connecticut adults and then compare those who made referrals to those who had not. This was impractical. However it was possible to measure the intention to refer to a social service agency, as measured by the Social Service Agency Referral Scale, for people who had made referrals, using them as a proxy for a predicted-behavior group. The following research questions were formulated with that in mind.

Research questions and hypotheses were as follows:

Question 1. Are there any demographic differences predictive of intention to refer to social service agencies?

Hypothesis 1. Among community members who have not made referrals, gender, rurality, age, race and education will account for significant variance in intention to refer as measured by referral scale scores.

Question 2. Is the general public less likely to have the intention to make a referral than those who receive training or those who have actually made referrals?

Hypothesis 2. The intention to refer will be different among study groups, specifically, the Training Group and Referred Group will have a higher intention to refer than the general Community Group.

Question 3. Does training increase perceived behavioral control?

Hypothesis 3. Following training, community members who have not previously referred will have higher scores in perceived behavioral control than prior to the training.

Question 4. Does the degree of willingness to refer to social service agencies depend on the circumstances of perceived need?

Hypothesis 4. There will be a significant moderating effect (interaction effect) of referral intention and level of perceived emergency in predicting behavior.

Question 5. Does intention to refer to social service agencies associate with social responsibility?

Hypothesis 5. Intention to refer to social service agencies is positively correlated with social responsibility.

Chapter 3: Methodology

Introduction

In this chapter the research design, sampling and survey methodology employed are described. The sampling plan and power analysis are then presented. This is followed by a discussion of the generation of and selection of the various measurement instruments included in the surveys. Support is presented for the reliability and validity of the Referral Scale. Arguments for four types of validity are made: face, content, construct, and criterion validity. The management of data and conduct of the statistical analyses are described. The chapter then concludes with a description of the steps undertaken to protect the human subjects and a summary.

Design

The research was a quasi-experimental study of three groups. Such designs are considered a useful method for gathering information under conditions which will not support a true experimental design, and are probably the most frequently used design in social research (Trochim, 2008).

The first group was designated as the Community Group; these respondents were a convenience sample of people who came in to their local senior centers for regularly scheduled activities and were a proxy for older adults residing in the community. They were chosen for reasons of practicality, because of the concentration and availability of seniors at the centers. This group, which is active and participating socially, is representative of the general population of older adults but may be reflective of those who are socially engaged and community residing. The second group was designated as the Training Group. This was a convenience sample of

people who came to a senior center specifically to participate in a Gatekeeper training. This group was recruited at the time of the training as a matter of practicality. The group contained some people who were not older adults, but were interested in knowing more about the Gatekeeper Program. The third group is the Referral Group. These were individuals who made referrals to the Gatekeeper Program and who had agreed at the time of the referral to participate in a survey which they were told might help improve the quality of the program; the members of this group had made referrals to the Gatekeeper Program not as part of their regular job duties. The logic for the selection of these three groups was that community members who simply went to a community center versus those who sought training for referring versus those who did refer might differ in a way that might provide insight into referral behavior. The Community Group would provide a baseline for the study. People whose regular job duties led them to be responsible for older adults were excluded from this survey. In addition to a cross-sectional survey, the present study also involved pre- and post-testing for those who were trained in the Gatekeeper Program in order to evaluate if training increased the score on the perceived behavioral control sub-scale of the Social Service Agency Referral Scale.

Sampling and Power

Data were collected from the three groups described above. The first, the Community Group, consisted of a convenience sample of people who came in to their local senior centers for regularly scheduled activities, such as bingo or a subsidized lunch. They were solicited to participate in the survey via a poster displayed by the student researcher and usually also by the staff at the senior center. This group serves as a proxy for active older adults. The second group, the Training Survey group, was a convenience sample of people who attended a Gatekeeper

training session at a senior center; the training was usually pre-announced in the local senior center's newsletter, so people came to the center specifically to participate in the training. The third source of respondents, the Referral Group, was 48 community members who had made referrals to the Gatekeeper program.

To provide a baseline for the Social Service Agency Referral Scale a series of surveys were conducted at senior centers throughout Connecticut; participants were designated as the Community Group. Because the population of Connecticut is so diverse in terms of urban, suburban and rural populations, one senior center in each of Connecticut's eight counties was selected, partly based on the responsiveness of senior center directors to a request for permission to conduct a survey. A number of senior centers were contacted whose directors refused to return calls, so some of the survey sites were chosen on the basis of availability.

There is little information available on whether there is a relationship between behavior and race/ethnicity, though the Bystander Effect suggested that there was an effect due to anticipated future interaction, such as might occur in a close-knit community. According to the Connecticut Economic Resource Council, Inc., in 2011 the two largest race/ethnic groups in Connecticut were African-Americans and Latinos/Latinas (Town profiles - State of Connecticut, 2012). African-Americans comprised 10% of the population, and 14% of the population was Hispanic (any race). Due to the cost of translating training materials into Spanish, non-English-speaking Hispanics/Latinas were not specifically recruited into this study, but African-Americans were. The three largest counties in Connecticut, Fairfield (11%), Hartford (13%) and New Haven (12%) - also have the largest African- American populations ("Annual Estimates of the Resident Population," 2012; "Connecticut Black Population

Percentage by County,” 2010), and as such, sampling of Senior Centers included inner-city senior centers in these counties to increase the likelihood that African-Americans were adequately represented in the final sample.

A deliberate effort to include other minorities in the community was not successful. Senior centers in Hartford and New Haven which serve largely Hispanic populations were contacted for the survey; one refused outright, the other failed to return repeated phone calls, even when the research was supported by the city’s Director of Social Services. New Britain was suggested as another possible location serving a significant Hispanic population. New Britain had a Hispanic population of 38% in 2012 (Town profiles – Hartford County – New Britain) which seemed promising, but a Community Survey conducted there yielded only one respondent identifying as Hispanic. The other city which supported the community baseline survey was Norwich, which had 11% African-American population, and 10% Hispanic (Town profiles - New London County - CERC regional profile 2012. 2012. Despite these efforts to include significant numbers of people of color in the Community Survey those identifying as Hispanic comprised only 4 members of the 113 Community Survey respondents. Likewise, African-American participation in the Community Surveys was limited to 4 respondents.

Participation in the Community Surveys was generally good, though it was a convenience sample. Personnel at all but one of the centers actively encouraged participation by its members, resulting in strong participation. At the Trumbull senior center recruitment was limited to a passive display of the recruiting poster, resulting in only 3 participants.

The Training Sample Survey, administered to people before and after Gatekeeper training, had somewhat better minority representation due to the participation of the Dixwell-

Newhallville Senior Center in New Haven. There 44 of 46 (96%) respondents identified themselves as African-Americans. Only one additional person in the Training Sample Survey identified him/herself as being African-American, bringing the total to 45 of 96 (47%) for the whole survey sample. No individual identified as Hispanic for the Training Sample Survey.

There were no expectations for the demographic make-up of people making referrals who responded to the Referral Survey. The survey was conducted over a period of eight weeks and yielded 40 responses. Two additional responses were identified as duplicates and discarded. The first had a unique out-of-state ZIP code; the postcard accompanying the first survey was not returned or did not arrive to prevent a second mailing to the same person. The second duplicate was identified because of a note attached indicating that the individual had already filled out one survey, but would not complete a third.

One referral resulted in two responses. A respondent contacted the student researcher after receiving a second survey to explain that she had passed the first survey along to her parents, because she had made the initial Gatekeeper referral on their behalf. She went on to explain that she had completed the second survey herself and already mailed it in.

In planning for the study it was anticipated that one or more of the demographic variables might be confounding. The prosocial behavior literature suggested that education might have an impact; the Bystander Effect suggested that gender, and the possibility of future interaction could also have an impact. Multiple regression to control for common demographic variables (gender, age, race, education and rurality) was employed. As such, sample size for the hypotheses was computed for regressions using the A-priori Sample Size Calculator for Multiple Regression (Soper, n.d.). Values were selected for a target power of .80 and a medium

effect size of $r = .15$, generally accepted values for social research (Trochim, 2006c). A sample size of 67 for all hypotheses analyzed with multiple regression was computed. Since Hypotheses 1 and 3 involved only one group target sample sizes were set at 67 for two study groups: The Community Group and the Training Group. Other hypotheses addressed comparisons between two groups or an aggregate of the first two groups as well as those who had made referrals, so it was anticipated that the total numbers would be adequate and somewhat evenly distributed. Hypothesis 3 was not identified as requiring a paired-samples *t*-test in the original proposal, and so was assigned a target sample size of 67 along with the other hypotheses.

The application to the UConn Institutional Review Board was approved on Dec.18, 2013 (see Appendix A). The application was subsequently modified because of the Referral Survey which was approved on January 23, 2014 (see Appendix B). For the Community Group (baseline), eight recruitment sessions at senior centers were undertaken, resulting in recruitment of 113 respondents. For the Training Group, participants were recruited at four training sessions for a total of 96 respondents (see Appendix C for the recruitment materials.) For the Referral Group, who had made referrals to the Gatekeeper Program and agreed to be surveyed, 48 respondents were identified and 40 responded. Because they had previously made referrals to the Gatekeeper Program, 2 Community Group respondents and 3 Training Group respondents were recoded into the Referral Group.

Instruments

The surveys for each of the groups consisted of the same demographic questions, the Social Service Agency Referral Scale and the Abbreviated Personal Responsibility Scale - the

latter two being composed of Likert-style items. For those in the Community and Training Groups, there was a 6-part cumulative-scaling or Guttman-type question (Trochim, 2006b) to assess the degree of emergency necessary to trigger action, the Perceived Emergency Index, and an open-ended question about possible responses to an emergency. There were a few additional demographic items or variations depending on the group being surveyed. For example, respondents in the Community Group were asked whether they had received Gatekeeper training, respondents in the Training Group were asked if this was their first Gatekeeper training. The surveys administered to the Community, Training and Referral Groups were titled the Community Survey, Training Survey and Referral Survey, respectively. The Community Survey was administered by the student researcher at senior centers; respondents were recruited at the time of the survey to fill them out. The Training Survey was also administered by the student researcher at senior centers and completed there by respondents who received Gatekeeper Training. It was requested that the center pre-announce the Gatekeeper Training in their monthly newsletters. The Referral Survey was mailed to participants and returned by mail to the student researcher's chairperson.

The Social Service Agency Referral Scale was designed specifically for this study to measure the factors associated with referral behavior as modeled by the Theory of Planned Behavior and informed by Bystander Effect. It includes sub-scales for subjective norms, perceived behavioral control, and attitude toward the behavior of making a referral to a social service agency. There were six items for each sub-scale, scored on a Likert scale of 1 to 7, 1 indicating strong disagreement with a statement, 7 indicating strong agreement. One item on each of the sub-scales was reverse-scored. Total scores across the three sub-scales were

summed to produce the final score. There is no existing instrument available to assess these specific constructs of attitude, subjective norm, or perceived behavioral control in regard to the action of making a referral to a social service agency, nor was there a standard Theory of Planned Behavior scale since, according to Ajzen, instruments must be designed for specific behaviors, which in this case was the activity of making a referral to a social service agency. The scale was constructed using Azjen's guidelines and examples provided by Azjen and others (Ajzen (a); Ajzen (b); Beck & Ajzen, 1991; Doll & Ajzen, 1992; Hrubes et al., 2001), and specifically those which were health-related (Mazzer & Rickwood, 2009; Reinecke et al., 1996; Schifter & Ajzen, 1985; Stecker et al., 2010).

The Social Service Agency Referral Scale was computed by first computing each sub-scale (attitude, subjective norm, and perceived behavioral control) as a sum of the values of each item as described by Ajzen (Ajzen, a; Ajzen, b). The sub-scales were computed using the missing values function (RMV) of SPSS for all respondents who answered at least five of the six items on each sub-scale; others were assigned a "missing" value of -1. The Social Service Agency Referral Scale value was then computed for each respondent who had completed at least 15 of the 18 items (83%) included in the scale, provided there was no more than one "missing" sub-scale value. This method yielded 87 (78.4%) usable scores for the Social Service Agency Referral Scale by 111 Community respondents.

Summary descriptive statistics for each of the 3 sub-scales of the Social Service Agency Referral Scale are presented in Table 1, along with the post-training Perceived Behavioral Control sub-scale. Of 249 surveys collected, at least 5 statements were scored for each sub-scale (the minimum for inclusion in subsequent analysis) for about 85%, 208 Attitude and Subjective

Norms sub-scales, and 212 Perceived Behavioral Control sub-scales. Statistics for all three sub-scales other than the post-training sub-scale appear to be similar, with broad ranges, similar means and standard deviations. Cronbach's alpha was computed for all sub-scales using the missing values function of SPSS, which substitutes the mean for missing values. The post-training Perceived Behavioral Control sub-scale differed slightly in having a narrower range and consequently less variance. The fact that the pre-training sub-scale has a Cronbach's alpha = .741 based on standardized items, further substantiates the idea that the sub-scale is measuring with consistency an increase in perceived behavioral control as a result of Gatekeeper training.

All scales display marked skewness and kurtosis, as responses tend to load toward higher values, which might be expected in this sample which skewed toward community involved individuals.

Table 1

Descriptive Statistics for Sub-scales of Social Service Agency Referral Scale

	Attitude	Subjective norms	Perceived behavioral control (PBC)	Post-training PBC
N	208	208	212	75
Range	36	33	36	18
Minimum	6	9	6	24
Maximum	42	42	42	42
Mean	35.7	33.9	35.5	37.5
SD	5.85	6.33	6.04	4.53
Cronbach's α^1	.774	.733	.741	.688

1 – Based on standardized items

Berkowitz and Lutterman (1968) developed and tested the eight-item Abbreviated Social Responsibility Scale based on an earlier 22-item scale which had high internal consistency in

that all items had a tetrachoric correlation of .45 or better (Berkowitz & Daniels, 1964).

Tetrachoric correlations are used when both variables are dichotomous, but it is necessary to treat them as though they are continuous and normally distributed; it is usually applied to ordinal versus ordinal data which has this characteristic (Calkins, 2005.). Berkowitz and Daniels dichotomized the ordinal data, which consisted of a Likert-type word scale which was scored from Strongly Agree to Strongly Disagree, which made the data appropriate for this analysis. Six of the eight items were drawn from this scale and two additional were constructed for their study; four of the items were reverse-scored to help avoid a response set bias. The eight-item scale was validated on samples of college students, and then administered to a statewide probability sample of 766 Wisconsin adults. The scale was designed to be administered by trained interviewers, rather than self-administered. The authors reported that the scale had a very satisfactory internal consistency. Several of the original statements were modified slightly to make them more appropriate for current usage, simplify them, or make them more broadly applicable. Original statements, scoring direction, and revised statements are displayed in Table 2. Copies of the Community, Training, and Referral Surveys may be found in Appendices E, F and G, respectively.

Table 2

Abbreviated Social Responsibility Scale Statements with Scoring Direction and Revised Wordings

Type	Statement	Direction
Original	It is no use worrying about current events or public affairs; I can't do anything about them anyway.	Disagree
Original	Our country would be a lot better off if we didn't have so many elections and people didn't have to vote so often.	Disagree
Revised	Our country would be better off if we had fewer elections.	
Original	Letting your friends down is not so bad because you can't do good all the time for everybody.	Disagree
Revised	Letting your friends down occasionally is not so bad because you can't do good all the time for everybody.	
Original	It is the duty of each person to do his job the very best he can.	Agree
Revised	It is the duty of each person to do his/her job the very best he/she can.	
Original	People would be better off if they could live far away from other people and never have to do anything for them.	Disagree
Original	At school I usually volunteered for special projects.	Agree
Revised	At school or work I usually volunteered for special projects.	
Original	Every person should give some of his time for the good of his town or country.	Agree
Revised	Every person should give some of her/his time for the good of her/his town or country.	
Original	I feel very bad when I have failed to finish a job I promised I would do.	Agree

Reliability and Validation of the Social Services Agency Referral Scale

The validity of the research is dependent on the quality of the instruments used to conduct it. Because this study relies on a unique instrument, the Social Service Agency Referral Scale, as dictated by the Theory of Planned Behavior, it is important that it can be used with

confidence. The following sections will discuss the reliability and validity of the instrument in accordance with current standards of acceptability.

Reliability

The first aspect of reliability to be examined is internal consistency. This was assessed via Cronbach's alpha, developed specifically to deal with multiply scored items such as the Likert scale employed here (Anastasi, 1988). The computation was performed using all 18 items which comprised the 3 subscales, including three which were reverse-scored. There were 249 surveys available from all three survey groups; items from the pre-training perceived behavioral control sub-scale were used for the Training Group. List-wise deletion for any missing variables resulted in selection of 144 valid cases for assessment of the overall scale reliability. The results for each survey group are shown in Table 3. Cronbach's alpha was computed as .90 (.914 based on standardized items). In general Cronbach's alpha of 0.70 is considered the minimum acceptable value for internal reliability (Lewis-Beck, Bryman, & Liao, 2004; Tavakol & Dennick, 2011; Trobia, 2008). It has been argued that an alpha coefficient of .90 or higher provides direct evidence to support the claim that a particular scale is measuring a uni-dimensional concept (Hudson, 1982; Nunnally, 1978.) The alpha score for the Social Service Agency Referral Scale suggests strongly that this instrument is reliably measuring a single construct.

Table 3

Differences in Measures of Intention to Refer by Survey Group

	Survey groups			Welch's F test ¹
	Community N=111 M (SD)	Training N=93 M (SD)	Referral N=45 M (SD)	
Social Service Agency Referral Scale	103.4 (19.56)	105.7 (13.94)	109.9 (12.14)	Welch's F(2,120.098) = 2.962, p = .055
"wouldn't hesitate to make a call"	5.8 (1.81)	5.7 (1.78)	6.3 (1.16)	Welch's F(2,95.577) = 1.274, p = .284
"it would be hard for me to get involved"	5.0 (2.05)	5.3 (1.92)	6.0 (1.56)	Welch's F(2,121.205) = 4.972, p = .008

1. Variance is not homogeneous

Finally, each sub-scale demonstrates internal consistency; details are shown in Table 1. The subjective norms subscale had Cronbach's alpha = .733. the attitude subscale had Cronbach's alpha = .774, the perceived behavioral control subscale had Cronbach's alpha = .741. The perceived behavioral control subscale after training had Cronbach's alpha = .688. As noted above these scores suggest that each sub-scale is consistently measuring an aspect of the Theory of Planned Behavior at a level considered reliable in social science research.

Validity

Validity is concerned with whether a test instrument does what it is intended to do (Anastasi, 1988; Hudson, 1982; Nunnally, 1978). There are four types of internal validity which

are usually examined in this context: face validity, content validity, construct validity, and criterion validity. These will be explained and discussed below. A fifth type of validity, external validity, is concerned with whether the instrument will do what is intended outside the scope of previous studies; this will also be discussed.

Face validity is technically not concerned with actual validity but whether the instrument under consideration appears superficially to be measuring the subject of interest. The Social Service Agency Referral Scale exhibits face validity in that all 18 items measure agreement/disagreement with statements related to making referrals to social service agencies. A deliberate effort was made to identify and include statements which reflected the broad range of potential influences on the act of making a referral to a social service agency, such as privacy concerns, self-efficacy, peer-pressure and personal social and ethical values. The statements were developed in conjunction with informal testing of the instrument and debriefing sessions with colleagues and acquaintances who assisted the student researcher. Further, each sub-scale exhibits face validity in that each item on it specifically addresses a specific attribute of the Theory of Planned Behavior: attitude toward the behavior, subjective norms about the behavior, or perceived behavioral control. The wording of each of these subscales in turn reflects their respective aspects on the behavior of interest, which is making a referral to a social service agency.

Content validity describes the degree to which the instrument is actually assessing the range of theoretical substance, the intention to refer others to a social service agency under the appropriate conditions. The fact that there is a significant positive correlation with the Abbreviated Social Responsibility Scale, as discussed later for Hypothesis 5, suggests that the

instrument is measuring a behavior which would be considered socially responsible, in particular such as referring an older adult to a social service agency. The content of each sub-scale has both face validity and the opportunity for the respondent to agree or disagree over a considerable range by means of the Likert scale employed, providing an opportunity to explore a considerable range of possible reactions to the statements presented.

Construct validity is the estimate of how much a measure represents the elements of a theoretical model, in this case, Ajzen's Theory of Planned Behavior. Ajzen posits three dimensions of intention to pursue a particular action: attitude toward the behavior, subjective norms surrounding the behavior, and perceived behavioral control. The Social Service Agency Referral Scale was developed with this in mind, and has three sub-scales corresponding to Ajzen's three dimensions. It was created according to Ajzen's guidelines (Ajzen, a; I. Ajzen, 1991), with a separate sub-scale of six items for each conceptual aspect of the Theory of Planned Behavior. Convergent and discriminant validity may be considered sub-categories of construct validity (Trochim, 2006a). Convergent validity measures the degree to which the instrument correlates to some similar construct, insuring that it measures what it is supposed to. The Social Service Agency Referral Scale was strongly correlated with the Abbreviated Social Responsibility Scale, $r = .48$, $N=192$, $p = .01$, as discussed below. To establish discriminant validity the instrument would have to fail to have a correlation with another instrument which measured some related but different characteristic, such as a tendency to avoid contact and engagement with other people. Such an instrument was not found in the research for this study, so discriminant validity cannot be established for the Social Services Agency Referral Scale at this time.

Criterion validity refers to the ability of a measurement tool to correlate well with some specified criterion, in this case, the making of a referral of another to a social service agency by a community member (Hudson, 1982). There are two forms of this identified as predictive or concurrent criterion validity, both of which are time dependent in different ways (Anastasi, 1988). Predictive validity is a measure of how well the instrument performs as a predictor of a particular outcome; in the strict sense such a predictor measures the outcome over a time interval. Concurrent criterion validity is determined by administering a well-validated instrument or using some other independent assessment, such as clinical judgment. If using another instrument one must be chosen which measures an identical or similar phenomenon with a similar and known capability at the same time as the one being validated, and the results are then compared.

In the case of the Social Service Agency Referral Scale it would have been impractical to administer the scale to a very large number of people and then wait to see if any of them made referrals to a social service agency, which would be the ideal way to measure predictive validity. Further study will be necessary to establish the predictive validity of the instrument.

If there is a significant positive correlation between the instrument being validated and some other independently validated instrument which measures a similar phenomenon, it can be reasonably assumed that the instrument being evaluated measures the same phenomenon as the established instrument, thereby establishing concurrent criterion validity. The Abbreviated Social Responsibility Scale fulfills the requirements for a comparison instrument.

Berkowitz and Lutterman (1968) developed and tested the eight-item Abbreviated Social Responsibility Scale based on an earlier 22-item scale which had high internal consistency in

that all items had a tetrachoric correlation of .45 or better. Six of the eight items were drawn from the 22-item scale and two additional were constructed for their study; four of the items were reverse-scored to help avoid a response set bias. The eight-item scale was validated on samples of college students, and then administered to a statewide probability sample of 766 Wisconsin adults. The scale was administered by trained interviewers, rather than self-administered. The authors reported that the scale had a very satisfactory internal consistency.

The Social Service Agency Referral Scale and the Abbreviated Social Responsibility Scale were strongly correlated, $r = .48$, $N=192$, $p = .01$, supporting a claim of concurrent criterion validity. A detailed discussion of this is presented in conjunction with the testing of Hypothesis 5 below.

External validity refers to the way in which an instrument may be considered useful for assessing a more general population. This is usually done by applying the instrument to a separate sample than the original for comparison. Resources were not available to do this; it is an area for future study.

Data Analysis Procedure

Data Management

Incoming surveys were assigned sequential numbers for subsequent identification. Data were entered into an SPSS database for analysis. Both the user account and flash-drive backup were password protected. Data were anonymous so there were no special security requirements.

Statistical Analysis

After the data were entered, the range for each item was examined, which led to the identification of miskeyed items. The SPSS package which was used had a slight tendency to

record double key strokes, so that many entries were doubled, such as “1” becoming “11,” which was readily identified and corrected. This was true of the entire range of values for Likert scale entries, which had values ranging from 1 to 7.

Data entry was facilitated by the fact that many of the demographic and qualitative questions were coded as numeric zero or one, making miskeys readily identifiable and correctable. Six of the 32 scale items were also coded with zeroes or ones, thus minimizing opportunities for data entry errors. Of the remaining 26 scaled items in the surveys, data entry was implemented by paying close attention to the numeric values being entered. When entries were complete, the last column on the data spreadsheet was checked to confirm that entry had concluded in the correct column. If not, the data was re-entered from the beginning of the scaled data. Data for the 26 items was assessed for values greater than 7 to check for miskeying.

Analysis was performed using SPSS Predictive Analytics SoftWare Statistics Gradpack 22.0 software. Descriptive statistics and frequency distributions were generated to contrast the sample groups. Missing data were managed by using the SPSS mean dot function which permits maximum use of collected data. Because the Social Service Agency Referral Scale is a new instrument a conservative approach was taken to applying the mean dot function to missing data; no more than one missing item per six-item sub-scale was permitted; if there were two or more missing values the sub-scale to which they applied was considered missing. The values generated by that function and the number of times it was applied for each statement are presented in Table 4. The statement numbers are from the Community Survey; it differs slightly from the Referral Survey, which asks some different questions, such as “What was your relationship to the person referred” and “How long have you known about the Gatekeeper

Program?” In general substitution values clustered around a value of 6, with one exception. All three of the reverse-scored statements showed significantly lower means, which could be due to misunderstanding of the negative wording. For example, statement 29 had score frequencies from 1-7 as follows: 26, 21, 14, 13, 7, 5, 3, and 12. As the scoring is reversed, it would be expected that the distribution of answers would continue the trend toward fewer responses instead of suddenly increasing.

Table 4

Missing Value Substitutions by Sub-scale and Statement

Perceived Behavioral Control			Subjective Norms			Attitude Toward Behavior		
Statement*	n	M	Statement*	n	M	Statement*	n	M
18	23	5.85	19	25	5.55	25R**	36	4.12
20	25	5.94	22	31	5.46	28	38	5.91
29R**	39	4.35	23	33	5.85	32	34	5.77
31	35	5.98	26	32	5.69	35	33	6.31
34	33	5.98	41R**	44	3.91	38	32	6.38
37	35	6.18	43	35	6.19	40	36	6.12

*Statement numbers are taken from the Community Survey

** Reversed scoring – values shown are reversed scores

Two open-ended questions in the Community and Training Surveys were used to identify possible themes related to emergency and non-emergency responses in an effort to better understand them and possibly guide future research. These were analyzed using the qualitative technique of reviewing the original responses for possible themes, then categorizing the responses by the perceived themes. For example, in determining which of several courses of action might be taken, many respondents answered in ways which indicated that it would depend on the circumstances; a category of “It depends” was established and responses which reflected this type of answer were assigned to the category.

Protection of Human Subjects

This study did not involve people who were referred to the Gatekeeper Program. No survey instrument contained any directly identifiable personal information, such as name, or indirectly identifying information, such as street address. Surveys from people in the first two groups (Community and Training) were aggregated at the time of their collection to protect their anonymity. People receiving Gatekeeper training who were surveyed completed a pre- and post-test which was linked by a serial number but no other identifying information.

In the case of the third group, those who made referrals to the Gatekeeper Program and agreed to be surveyed, the contact information was collected directly into a laptop database at each agency's site. The data were used to generate personalized letters, and mailing labels; after the survey period these data were erased. To help insure anonymity of those surveyed, a postcard mailed to a different address was used to identify the fact that people completed the survey after the first mailing so they could be removed from the mailing list and not sent a second reminder survey. People completing the survey returned the surveys by mail to the student researcher's chairperson who aggregated them and reviewed them to insure there was no personally identifying information added to the surveys. Paper lists of names and addresses which were used as checklists for the mailings were destroyed after the mailings. No other paper records were generated.

Chapter 4: Findings

Introduction

In this chapter, the findings from the field research are presented in 4 sections:

Descriptions and Demographics, Hypothesis Testing, and Other Findings. In Descriptions and Demographics basic information about the number of surveys collected, locations surveyed, and demographic characteristics of the surveyed population are presented. This section also includes presentation of the qualitative information regarding emergency and non-emergency responses. The section concludes with a discussion of the Perceived Emergency Index, a scaled index or Guttman question which was included in the Community and Training Surveys, and a discussion of differences in intention to refer by demographic characteristics and survey type.

As noted previously, prior to statistical analysis two Community respondents and three Training respondents who had indicated that they had already made referrals to the Gatekeeper Program were recoded into the Referral Group. All statistics presented reflect this recoding.

In the process of examining the data it was noted that two of the items on the Perceived Behavioral Control sub-scale could be stand-alone measures of intentionality. The first was item 18 from the Community and Training Surveys which was the same as item 16 from the Referral Survey, “I wouldn’t hesitate to make a call about an older adult who seemed to be experiencing difficulty.” The second was item 29 from the Community and Training Surveys and which was the same as item 27 from the Referral Survey, “If I saw an older adult in difficulty, it would be hard for me to get involved, even by making a confidential call,” which was reverse scored. With the consent of the student’s doctoral committee these items were included in an

exploratory analysis. The chapter concludes with findings from this analysis which were not driven by the hypotheses presented.

Descriptives

Descriptive statistics for the Social Services Agency Referral Scale, the Abbreviated Social Responsibility Scale, and the Perceived Emergency Index for each of the three study groups are presented in Table 5. Of 249 surveys completed, aggregate scores could be computed for 78 percent. Across all three surveys, 55 (22.1%) Social Service Agency Referral Scales were not usable due to missing data, even by using the Replace Missing Values function of the SPSS statistical package. Across all respondents 45 (19%) did not have usable Abbreviated Social Responsibility Scale scores. Finally, only 2 of the 204 (1%) Community and Training respondents did not have usable Perceived Emergency Index scores. Three factors may have contributed substantially to this attrition rates for the Social Service Agency Referral Scale and the Abbreviated Social Responsibility Scale. The first is the casual method of recruitment; despite efforts to have the senior centers publicize the surveys ahead of time, many of the participants in the Community Surveys seemed unaware that the event was taking place when invited to participate. Second, the information sheets (Appendix D) emphasized that participation was optional and that “You do not have to answer any question that you do not want to answer for any reason.” The third reason is that participants were not rewarded or compensated for their participation, which may have lessened the importance to them of completing the survey.

Response to the Social Service Agency Referral Scale in the Community Group had the broadest range of all three groups reflected in much higher variance for the Community Survey

than others. Mean scale scores trend up from Community to Training to Referral Surveys. This may reflect increasing levels of engagement, and therefore willingness to cooperate more fully with the survey process. A number of Community Surveys were systematically completed with low scores, and that group of participants may have reflected those least likely to be engaged or to become “Gatekeepers.” This is reflected in much higher variance for the Community Survey than others.

Table 5

Descriptive Statistics for Scales by Study Group

	Community		Pre-Training		Referral		All	
Social Services Agency Referral Scale								
Valid <i>N</i>	87	76%	63	68%	44	98%	194	78%
Mean	103.42		5.71		109.97		105.65	
SD	19.56		13.94		12.14		16.50	
Valid <i>N</i>	65	59%	52	56%	39	87%	156	63%
Cronbach's α	.939		.867		.894		.914	
Social Responsibility Scale								
Valid <i>N</i>	87	78%	68	74%	42	95%	197	79%
Mean	42.31		45.41		46.23		44.21	
SD	7.27		5.47		6.06		6.64	
Perceived Emergency Index								
Valid <i>N</i>	109		93				202	87%
Mean	4.73		4.54				4.64	
SD	1.52		1.61				1.56	

Descriptions and Demographics

Collection sites

A total of 249 surveys were obtained, as shown in Table 6. As described above (Chapter 3 – Sampling and Power), there were three groups. The first, the Community Group, consisted of a convenience sample of people who came in to their local senior centers for regularly scheduled activities. The second group, the Training Group, was a convenience sample of people who came to the senior center specifically to participate in the Gatekeeper Training. The third source of respondents, the Referral Group, was community members who had actually made referrals to the Gatekeeper program who also met the specific criteria of agreeing to be surveyed and not having made the referral as part of their regular job duties.

There were 111 Community Surveys, accounting for 45% of the total; 93 Training Surveys were collected (37%), and 45 Referral Surveys accounted for 18%. Community Surveys were collected from eight locations and varied widely in participation, ranging from three at the Trumbull Senior Center to 32 in Wallingford. Training Surveys were obtained from four locations, and participation ranged from nine in Westbrook to 46 from the Dixwell-Newhallville senior center in New Haven. Attendance at the Dixwell-Newhallville senior center was almost exclusively African-American and had a large turnout on the day the Training Survey was taken; this resulted in overrepresentation of this population in the Training Survey, 48%, versus the statewide representation of only 6% of those over 65 (“Annual State Population”, 2014). . Referral Surveys were returned by 40 of the 48 people sent a mail-in survey (83%); reclassification of two in the Community and three in the Training Groups who indicated that they had previously made referrals raised the number of Referral Surveys to 45.

Table 6

Surveys by Type and Location*

Survey Type	Location	Number	%
Community	Brookfield	8	3%
	Mansfield	10	4%
	New Britain	14	6%
	Norwich	24	10%
	Portland	9	4%
	Quinninebaug Valley	13	6%
	Trumbull	3	1 %
	Wallingford	32	14%
	Subtotal	113	45%
Training	Berlin	18	8%
	Canton	23	10%
	New Haven	46	20%
	Westbrook	9	4%
	Subtotal	96	39%
Referral	Mail	40	16 %
	Total	249	100%

*- before reclassification of 2 Community and 3 Training Surveys

Gender

Six people did not supply gender information. Of those who did, 75% were female.

Gender distribution for Community and Referral Surveys was nearly identical at 72% and 71% female, respectively. The Training Survey had slightly more female representation, at 76%.

Demographic information by survey type is provided in Table 7. There was no significant difference between groups by gender.

Table 7

Gender, Rurality, Education, Race and Age by Survey Type

Gender	Survey Group						Significance Test
	Community		Training		Referral		
Female	78	72%	73	76 %	32	71%	$X^2(2)=2.609,$ $p=.271$
Rural	8	8%	13	14%	10	22%	$X^2(2)=6.295,$ $p=.043$
Education							
<= High School	68	61%	34	37%	11	24%	
>=2-Year College	41	39%	55	59%	34	76%	$X^2(2)=22.319,$ $p<.001$
Race							
White	94	85%	47	53%	37	94%	
Non-white	14	13%	45	47%	8	6%	$X^2(2)=38.629,$ $p<.001$
	Mean	SD	Mean	SD	Mean	SD	
Age	73.3	8.7	66.5	15.1	55.9	13.6	Welch's $F(2,98.943) =$ $33.093, p < .001$
Total # Surveys by Group	111		93		45		

Rurality

For purposes of this study rurality was determined by ZIP code, as noted in the surcharge table of United Parcel Service (“Domestic Delivery Area Surcharge,” 2005), a method suggested by a group consulting to the United States Postal Service Regulatory Commission (“SJ Consulting Group, Inc.,” 2011). There were 225 legible ZIP codes out of 249 (90%) total responses. Based on that, 12% of all respondents were rural (see Table 7). Only eight (7%) Community Survey respondents were classified as rural, 13 (14%) Training Survey respondents were classified as rural, and 8 (18%) Referral Survey respondents were classified as rural. A chi-square test indicated significant difference between groups, as relatively few of the people in the Community Surveys were from rural communities as identified by ZIP code.

Education

Only 6 people failed to identify their educational level. Educational level was scaled from Elementary (1) through Graduate (5). The mode of education for all respondents was high school (42%). The mode for the Community and Training Groups was also a high school education. The mode of education for the Referral group was a graduate college degree. Education was dichotomized based on a high school education or less. A chi-square test indicated statistically significant difference between the groups, as people in the Referral Survey group had relatively high levels of education compared to the other groups. See Table 7.

Racial Identity

Dichotomized racial identity data are contained in Table 7. Of the total 249 respondents, four people did not provide this information, 235 people identified with one racial identity, and ten people self-identified with two groups. Eight of the ten identifying with more than one race

claimed Native American ancestry; six of these eight identified as White-Native Americans, two identified as African and Native Americans. The remaining two of the ten identified as African-American and Multi. Only one person self-identified as “Multi.” Of note is that nearly half the respondents (48%) in the Training Survey were African-American. The results were dichotomized for analytic purposes into “white” and “non-white.” A chi-square test indicated significant differences in racial composition between groups, due to the Training Survey group having over-representation of African-Americans, and the Community and Referral Groups having under-representation of African-Americans as a whole, which is 10% for all of Connecticut (“Town profiles - State of Connecticut - CERC regional profile 2012,” 2012), or African-Americans over 65, which is only 6% of the total population (“Annual State Population”, 2014). .

Despite an effort to be broadly inclusive there were few Hispanics present in the survey. Identity with the Latina/o community was made by only eight respondents, four each in the Community (4%) and Referral Surveys (9%) respectively. There were none in the Training Survey.

Age

A legible age value was supplied by 235 of the 249 respondents (94%). For all respondents the mean age was 67.6 ($SD = 13.9$), with a median age of 69 and a range of 27-92. Group specific age data are supplied in Table 7. The median age for the Community Group is 74 and it has a range of 55-92. For the Training Group 88 of 93 respondents (95%) supplied a legible age. The mean age was 66.5 ($SD = 15.1$), with a median age of 69 and a range of 27-91. For the Referral Group 43 of 45 respondents supplied a legible age. The mean age was 55.9 (SD

= 13.6), with a median of 56 and a range of 27-83. A histogram representing the age distribution is shown in Figure 2.

Because the age distribution did not have homogeneity of variance, Welch's t-test, which is robust to that assumption (One-way ANOVA in SPSS, n.d.b), was run to determine if there were any significant differences among the groups by age. The result indicated significant difference in age. Various younger professional community members participated in the Gatekeeper training, which helped reduce the mean age of that group, and those in the Referral Group are believed for the most part to still be active in the workforce, lowering the mean age of that group still further, resulting in an eighteen year disparity between the Community and Referral Groups.

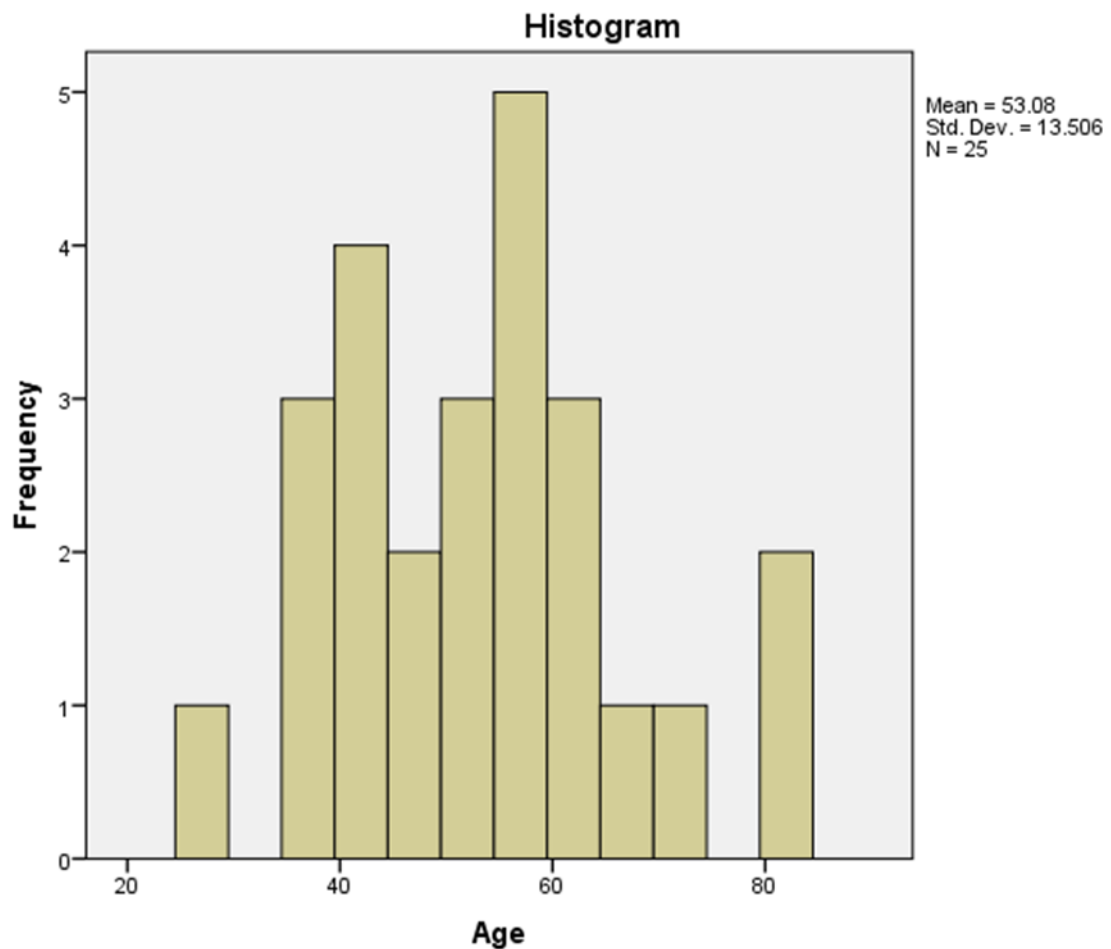


Figure 2. Frequency Distribution by Age of All Respondents

Civic Organization Membership

Descriptive statistics were generated for a question regarding the number of civic organizations to which respondents belonged. Answers ranged from zero to 20. Nine people belonged to 5 organizations, five people belonged to 6 organizations, and one belonged to 7, two to 8, and one to 9. The frequency of response for five to nine organizations shows a strongly diminishing trend. Five respondents answered 10, one with 12, and one with 20; because these responses were sharply against the trend they were considered outliers. After

eliminating these outliers descriptive statistics were regenerated. Answers were supplied by 186 respondents, with a median number of 1, a mean number of civic organizations of 1.6 ($SD = 1.8$), and a range of 0-9. Community Survey respondents had a median of 2, a mean of 1.6 ($SD = 1.8$) and a range of 0-8. Training Survey respondents had median of 1, a mean of 2.3 ($SD = 1.8$) and a range of 0-9. Finally, the Referral Group has a mean of 1.46 ($SD = 1.3$) civic organizations, a median of 1 and a range of 0-4.

Emergency and Non-Emergency Responses

Community and Training Group members were questioned about their possible reactions to emergency and non-emergency situations. Among all 249 respondents, only 77% indicated that they would call 9-1-1 in an emergency. Others indicated that they would try to help in some way, such as calling 2-1-1 or trying to get in touch with a family member. Of 23 respondents who selected “Other” as a response, explanations fell into four categories. Four (17%) indicated that their response would “Depend on the circumstances.” Eleven (48%) indicated that they would try to help directly in some way. Three (13%) indicated that they would try to contact someone, such as a family member. Five (22%) indicated that they would try to contact a service organization such as police or fire directly.

For non-emergency responses results varied considerably; the results are displayed in Table 8. The three most common responses overall were call 9-1-1 (32%), call the non-emergency police number (43%), and call Protective Services for the Elderly (22%).

Table 8

Non-emergency Response Activities

Action	Survey Type				Total	
	Community		Training			
Call 9-1-1	43	38%	21	24%	64	32%
Call non-emergency police number	40	36%	46	52%	86	43%
Call the Municipal Agent	8	7%	17	19%	25	12%
Call DSS Elderly Protective Services	21	9%	24	27%	45	22%
Call the Gatekeeper Program	4	4%	8	9%	12	6%
Call 2-1-1	9	8%	14	16%	23	11%
Other	19	17%	19	22%	38	19%

Of 40 respondents who selected “Other” as a response, explanations fell into five categories. Eight (20%) indicated that their response would “Depend on the circumstances.” Nine (23%) indicated that they would try to help directly in some way. Thirteen (33%) indicated that they would try to contact someone, such as a family member. Three (8%) indicated that they would try to contact a service organization such as police or fire departments directly. Six (15%) indicated that they would contact social services. One response could not be classified.

Respondents who selected multiple actions in response to the non-emergency situation were invited to provide their reasons for choosing multiple responses. Twenty-two respondents provided such written explanations. Fifteen (68%) responded that it would “depend on the situation”; four (18%) indicated that they would contact the police or 9-1-1, the other three responses (14%) could not be categorized.

Perceived Emergency Index

The Perceived Emergency Index was constructed using a Guttman-style technique with an eye to identifying a “tipping point” where people would usually get involved. Six statements were provided respondents and they were asked in each circumstance if they would be willing to get involved. The statements were worded to present increasingly dire situations involving a stranger. Community and Training Groups were used to compute the index; there were 204 members in both groups. The Perceived Emergency Index was computed by assigning a low value for respondents who would only act in the most dire emergency and a high value for respondents who would act at the least perceived emergency (“wandering a store talking to him/herself”), ranging from 1-6. The number of respondents willing to get involved increased with each increase in perceived emergency, with nearly 100% willing to get involved in the most dire situation. Two respondents responded with complete refusal to get involved. See Table 9 for details. An independent samples t-test was performed to determine if there were significant differences in the means of the Perceived Emergency Index between the Community and Training Groups. The mean value for the Community Group ($M = 4.73$, $SD = 1.53$) and the Training Group ($M = 4.54$, $SD = 1.61$) did not differ significantly, $t(200) = .890$, $p = .375$.

Table 9

Respondents Willing to Take Action for an Older Adult Who Was a Stranger

Condition	n	<i>Cumulative n</i>	<i>Cumulative %</i>
“wandering a store talking to him/herself”	75	75	37
“wandering a store who appeared to be intoxicated”	60	135	66
“sitting on the sidewalk”	32	167	82
“sitting on the sidewalk who had been sick”	12	179	88
“lying on the sidewalk not moving”	1	180	88
“lying on the sidewalk not moving and I could see blood”	22	202	99

Intention to Refer Differences by Demographic Values

Differences in intention to refer by demographic characteristics are presented in Table 10. Intention to refer was identified for investigatory purposes by both the Social Service Agency Referral Scale and the answer to two specific questions from the Perceived Behavioral Control sub-scale. The statements “I wouldn’t hesitate to make a call about an older adult who seemed to be experiencing difficulty” and “If I saw an older adult in difficulty, it would be hard for me to get involved, even by making a confidential call” which was reverse scored were analyzed as dependent variables.

Table 10

Differences in Measures of Intention to Refer by Demographics

	Measure of Intention to Refer		
	Social Service Agency Referral Scale	"wouldn't hesitate to make a call"	"it would be hard for me to get involved"
Gender			
Female	$n = 143, M = 105.32, SD = 16.53$	$n = 183 M = 5.87 SD = 1.61$	$n = 183 M = 5.39 SD = 1.74$
Male	$n = 48, M = 106.53, SD = 16.98, t(183) = .433, p = .666$	$n = 60 M = 5.85 SD = 1.50, t(217) = -.070, p = .944$	$n = 60 M = 5.28 SD = 1.90, t(204) = -.412, p = .681$
Age $M = 67.57 SD = 13.86$	$r_s(186) = -.127, p = .083$	$r_s(214) = -.060, p = .386$	$r_s(200) = -.285, p < .001$
Rurality			
Rural	$n = 27 M = 105.64 SD = 17.28$	$n = 31 M = 5.63 SD = 1.68$	$n = 31, M = 5.49, SD = 2.07$
Non-rural	$n = 168, M = 106.18, SD = 16.11, t(183) = .159, p = .874$	$n = 194, M = 6.00, SD = 1.45, t(204) = 1.301, p = .195$	$n = 194, M = 5.46, SD = 1.67, t(193) = .071, p = .943,$
Education			
\leq High School	$n = 89, M = 105.56, SD = 17.11$	$n = 113, M = 5.91, SD = 1.64$	$n = 113, M = 5.22, SD = 1.87$
≥ 2 -Year College	$n = 102, M = 106.33, SD = 15.81, t(189) = -.324, p = .746$	$n = 102, M = 5.85, SD = 1.54, t(218) = .295, p = .768$	$n = 102, M = 5.47, SD = 1.69, t(203) = 1.073, p = .285$
Race			
White	$n = 154, M = 105.55, SD = 17.03$	$n = 182 M = 5.95 SD = 1.49$	$n = 182 M = 5.95 SD = 1.79$
Non-white	$n = 39, M = 105.61, SD = 1.85, t(191) = 1.114, p = .267,$	$n = 63, M = 5.53, SD = 1.85, t(80.634) = 1.192, p = .059^a$	$n = 63, M = 4.96 SD = 1.73, t(205) = 2.096, p = .013$

a. Equal variance not assumed

Differences were assessed using a t-test for the dichotomized demographic independent variables. Spearman's correlation was used for age, since there was not an apparent linear

relationship between age and intention to refer, an assumption of Pearson's correlation. In general demographic characteristics did not appear to play a role in intention to refer, with two exceptions. The reverse-scored statement "it would be hard for me to get involved" showed a significant negative correlation for age, as shown in Table 10, and there were significant differences between the means of the white ($M = 5.50$, $SD = 1.77$) and non-white groups ($M = 4.91$, $SD = 1.74$) after reverse scoring, indicating more disagreement with the statement "it would be hard for me to get involved" for the white group.

Intention to Refer Differences by Survey Group

Differences in intention to refer by survey group are presented in Table 3. Because each measure of intention to refer violated the assumption of homogeneity of variance (Levene's statistic was significant for all three) Welch's t-test was employed, which is robust to a violation of that assumption (One-way ANOVA in SPSS, n.d.c). Of all three measures of intention to refer only the single reverse-scored statement "it would be hard for me to get involved" showed statistically significant differences between the survey groups (Welch's $F(2,121.205) = 4.972$, $p = .008$).

Hypothesis Testing

The following section discusses results of statistical analysis as related to each of the five proposed hypotheses. Discussion of the implications is deferred to the following chapter.

Findings Related to Hypothesis 1

Hypothesis 1. Among community members who have not made referrals, gender, rurality, age, race and education will account for significant variance in intention to refer as measured by referral scale scores.

The intention to refer to a social service agency was measured by the Social Service Agency Referral Scale. Gender and rurality are dichotomous; race and education were dichotomized as detailed previously. Data met the assumptions required for a multiple regression, including homoscedasticity, a lack of collinearity, and an approximate normal distribution of residuals (Multiple Regression Analysis using SPSS Statistic, n.d.). Data appeared to have homoscedasticity based on visual examination of the scatterplot of standardized residuals against the dependent variable; neither tolerance nor VIF indicated the presence of collinearity, and the residuals appeared to be normally distributed (visual examination of histogram and normal P-P plot).

The gender, age, rurality, the education dummy variable and the race dummy variable were regressed in one step on the Social Service Agency Referral Scale score, using pair-wise deletion. The result was 69 (68%) usable cases for the regressions. There was not a significant effect of any of the five demographic variables at the $p = .05$ level on the Social Service Agency Referral Scale score, $F(5, 63) = 0.78$, $p = .570$. While Berkowitz and Lutterman (1968) found

gender to be significantly related to Abbreviated Social Responsibility Scale scores, and gender was found to play a role in some Bystander Effect studies (Levine & Crowther, 2008) gender was not found to be significantly associated with the Social Service Agency Referral Scale.

Because of the high attrition rate further analysis was conducted by regressing all demographic variables in one step on a dichotomous dummy variable indicating whether the Social Service Agency Referral Scale was missing, to try to identify any pattern to the missing cases. The model as a whole was not significant, $\chi^2(5) = 7.516, p = .185$. However the Wald statistic (5.742) for the dichotomous race variable was significant, $p = .017$. The Community Survey Group was overwhelmingly white (94 of 108 reported), of whom 15 (16%) failed to complete enough items to compute the Social Service Agency Referral Scale. However, of the 14 non-white respondents completing the scale six (43%) failed to complete enough items to produce a usable score. For comparison, among white-identified Training Group members, 10 (22%) failed to complete enough items to compute the Social Service Agency Referral Scale, but 20 of 47 (42%) of non-white members failed to complete enough items, a similar percentage to the non-whites in the Community Group. These findings were not consistent with the Referral Group, of which 8 of 45 (18%) were non-white, but all eight completed the Social Service Agency Referral Scale; one white member of the group failed to complete it. One possible explanation for this high-level of attrition is that the tool was not as culturally relevant for the African-American population.

As an exploratory investigation, the one-step regression was conducted using the two statements of intention from the Social Service Agency Referral Scale previously identified as the dependent variables. None of the demographic variables entered in the regression were

statistically significant. The overall model was also found to be not statistically significant, $F(5, 86) = 2.031, p = .082$.

A one step regression for the reverse-scored statement 29 was performed. None of the demographic variables entered in the regression were statistically significant. The overall model was also found to be not statistically significant, $F(5, 86) = 1.871, p = .108$.

Findings Related to Hypothesis 2

Hypothesis 2. The intention to refer will be different among study groups, specifically, the Training Group and Referred Group will have a higher intention to refer than the general Community Group.

The independent variable, intention to refer, was measured as the total score on the Social Service Agency Referral Scale. The data did not meet assumptions for use of ANOVA. One assumption for use of ANOVA is approximately normal distribution for each category of the independent variable and homogeneity of variance (One-way ANOVA in SPSS, n.d.a). Although the Shapiro-Wilk test suggests the assumption of normal distribution was violated for all three groups ($p < .001$), because ANOVA is fairly robust to violations of this assumption (One-way ANOVA in SPSS, n.d.b) the analysis was performed as planned. The hypothesis was tested using a one-way ANOVA. However Levene's test did not support homogeneity of variance ($p=.040$), so Welch's t-test was used; this test is robust to this condition (One-way ANOVA in SPSS, n.d.c) No significant differences between groups was found, $F(2,120.1) = 2.962, p=0.055$.

Findings Related to Hypothesis 3

Hypothesis 3. Following training, community members who have not previously referred will have higher scores in perceived behavioral control than prior to the training.

The hypothesis was tested using a paired samples t-test comparing the value of the perceived behavioral control subscale pre- and post-training ($\alpha = .05$). The perceived behavioral control sub-scale was computed using the procedure described above for both pre- and post-training subscales. The paired-samples t-test assumes a normal distribution of the pairs differences (Paired-samples t-test in SPSS -Assumptions of the paired-samples t-test, n.d.). The Shapiro-Wilk statistic indicated that the data was not normally distributed ($p = .002$). Because the test is relatively robust to violation of its assumptions (Paired-samples t-test in SPSS- Dealing with violations of normality, n.d.), the paired-samples t-test was conducted to compare sub-scale values before and after training. There was a significant difference in the scores for pre-training ($M=35.8$, $SD=4.98$) and post-training ($M= 37.8$, $SD = 4.41$) conditions; $t(66) = -3.40$, $p = 0.001$. These results suggest that training really does have an effect on perceived behavioral control of the ability to make a referral. Specifically, our results suggest that when people are trained their perceived behavioral control over the ability to make a social service agency referral increases.

Because there was such a large attrition rate in usable cases (66 of 96 total), tests were run to ascertain if there were differences between those who completed the surveys and those who did not. It was found that 37 people failed to answer enough questions to generate an overall Social Service Agency Referral Scale score or a score on the post-test Perceived Behavioral Control scale. Therefore, the two groups (those who provided sufficient responses to

generate scale scores and those who did not) were compared on each sub-scale, using independent-sample t-tests. Comparisons were made using the failure to complete either scale as the grouping criterion, and scores on the Attitude Toward Behavior sub-scale and the Subjective Norms sub-scale as the test variables. There was no significant difference on the Attitude Toward Behavior sub-scale in the scores for the group which failed to complete both scales ($M=33.7$, $SD=5.92$) and those which completed either the total scale or the post-training Perceived Behavioral Control sub-scale ($M = 36.1$, $SD = 4.11$) conditions; $t(74) = 1.57$, $p = 0.120$, equal variance assumed and supported by Levene's test. There were significant difference on the Subjective Norms sub-scale in the scores for the group which failed to complete both scales ($M = 30.6$ $SD = 7.45$) and those which completed either the total scale or the post-training Perceived Behavioral Control sub-scale ($M = 34.8$, $SD = 6.0$) conditions; $t(69) = 2.09$, $p = 0.040$, equal variance assumed and supported by Levene's test.

Additional comparisons were made using the failure to complete the Subjective Norms sub-scale as the grouping variable. There was no significant difference on the Attitude Toward Behavior sub-scale in the scores for the group which failed to complete the scale ($M = 33.5$, $SD = 4.22$) and those who completed the sub-scale ($M = 35.9$, $SD = 4.54$) conditions; $t(74) = 1.44$, $p = 0.156$, equal variance assumed and supported by Levene's test. There was no significant difference on the Perceived Behavioral Control sub-scale in the scores for the group which failed to complete Subjective Norms sub-scale ($M=33.9$ $SD=5.01$) and those which did complete it ($M=35.9$ $SD=5.07$) conditions; $t(74)=1.44$, $p = 0.156$, equal variance assumed and supported by Levene's test.

A final set of comparisons was made using the failure to complete the Attitude Toward Behavior sub-scale as the grouping variable. There was no significant difference on the Subjective Norms sub-scale in the scores for the group which failed to complete the scale ($M = 33.1$, $SD = 3.90$) and those who completed the sub-scale ($M = 34.1$, $SD = 6.50$) conditions; $t(69) = 2.58$, $p = 0.797$, equal variance assumed and supported by Levene's test. There were no significant difference on the Perceived Behavioral Control sub-scale in the scores for the group which failed to complete the Attitude Toward Behavior sub-scale ($M=29.5$ $SD=7.07$) and those which did complete it ($M=35.8$ $SD=5.04$) conditions; $t(74)=1.84$, $p = 0.084$, equal variance assumed and supported by Levene's test.

In summary, comparing those who failed to complete a sub-scale to those who did not found a significant difference only in those groups which failed to complete at least one of the pre-training or post-training Perceived Behavioral Control sub-scales. That difference occurred between the groups for the means on the Subjective Norms sub-scale.

Findings Related to Hypothesis. 4

Hypothesis 4. There will be a significant moderating effect (interaction effect) of referral intention and level of perceived emergency in predicting behavior.

This hypothesis proposed that intention to refer, as measured by the Social Service Agency Referral Scale, and perceived level of emergency, as measured by the Perceived Emergency Index, will interact to predict referral intention behavior. Community Surveys and Training Surveys were selected for the analysis. An interaction product was computed using the two scales, and a logistic regression was performed to ascertain the effects of the Social Service Agency Referral Scale, the Perceived Emergency Index, and their multiplicative product to test

interaction on the likelihood that a respondent's survey group could be predicted. Logistic regression assumes among other things, independence of cases, no multicollinearity, that there are no significant outliers and that categories are mutually exclusive. The data appears to meet these assumptions.

The analysis was performed comparing the Community and Training Groups, regressing on the Social Service Agency Referral Scale, the Perceived Emergency Index, and their product as a third independent variable, with survey type as the dependent variable. The overall logistic regression model was not statistically significant, $\chi^2(3) = 2.389, p = .496$. The coefficient for the interaction term was found to be non-significant ($B = .01, SE = .01, p = .356$), suggesting perceived emergency does not moderate the effect of the Social Service Agency Referral Scale on Community versus Training Groups.

Findings Related to Hypothesis 5

Hypothesis 5. Intention to refer to social service agencies is positively correlated with social responsibility.

To test this hypothesis, social responsibility, as measured by the Social Responsibility Index, was tested with the intention to refer, as measured by the Social Service Agency Referral Scale for the entire survey population. The Abbreviated Social Responsibility Index was computed using the missing values function (RMV) of SPSS for all respondents who answered at least seven of eight Social Responsibility Scale items; others were assigned a "missing" value of -1. Despite this conservative approach to missing data, using pairwise deletion there were 185 surveys of the 249 (74%) total available for analysis. Values for the Social Service Agency Referral Scale were computed as described previously.

Examination of a scatter-plot appeared to indicate a linear relationship between the two sets of data, an underlying assumption for the Pearson product-moment correlation. However, a test of normality indicated that neither the Social Service Agency Referral Scale nor the Abbreviated Social Responsibility Scale had a normal distribution, $p < .001$, which violates another of the assumptions underlying use of the Pearson correlation. Since the scatter-plot appeared to support a monotonic relationship between the two variables and other underlying assumptions were met a Spearman rank-order correlation was conducted using pairwise exclusion. There was a positive correlation between these two scores, which was statistically significant, $r_s(185) = .451, p < .001$, suggesting that the hypothesis was supported.

An exploratory investigation a Spearman rank-order correlation was conducted using statements 18 and 29 as identified on the Community Survey (Appendix E) in place of the complete Social Service Agency Referral Scale. For statement 18 there was a positive correlation with the Abbreviated Social Responsibility Scale which was statistically significant, $r_s(197) = .213, p = .003$. For statement 29 there was a positive correlation between these two scores, which was statistically significant, $r_s(197) = .470, p < .001$.

Other Findings

Civic organization membership. Since the number of civic organizations that Training Survey group members belonged to appeared to be higher than others an independent samples t-test was carried out to compare these members to others surveyed on the number of civic organizations to which participants belonged (the dependent variable), disregarding outliers (> 9 memberships). There were significant differences ($t(205) = -3.15, p < .002$) between Training Survey group members ($M = 2.91, SD = 3.12$) and the Community and Referral Survey

members combined ($M = 1.75$, $SD = 2.16$), with the Training Group reporting higher number of civic organization memberships than the other groups. . The majority of the Training Survey members were obtained at a single location, the Dixwell-Newhallville Senior Center, which had an almost exclusively African-American membership. A second independent samples t-test was run on Training Group members, comparing African-Americans to all others for civic organization membership. There were no significant differences ($t(75) = -.638$, $p = .524$) in civic organization membership between African-American Training Group members ($M = 3.17$, $SD = 3.81$) and the Community and Referral Survey members ($M = 2.71$, $SD = 2.43$).

Willingness to make a call after training. The post-training survey contained the perceived behavioral control subscale plus one additional question, “If I see an older adult experiencing difficulty I will make a call on his/her behalf.” Like the six questions of the subscale this one was presented with Likert scoring of 1 (strongly disagree) to 7 (strongly agree.) The result of this question is displayed in Table 11. The majority of those who responded to this question, 67 (92%) people, chose 6 or 7 on the Likert scale, which indicated strong agreement with the statement that they were likely to make a call. The value of the perceived behavioral control post-training sub-scale was regressed on the additional question. The result indicates that the perceived behavioral control sub-scale is significant ($B = .114$, $SE = .012$, $p < .001$), and the overall model accounted for a significant proportion of variance in response to the single question, $R^2 = .56$, $F(1, 70) = 88.87$, $p < .001$.

Table 11

Frequency of “Will Call” Question for Post-Training Respondents.

Response	Frequency	%
4	1	1
5	5	7
6	25	34
7	42	58
	73	100
Missing	20	
	93	

Possible reactions in a general emergency. Of 204 Community and Training Survey respondents who were questioned about their possible reactions to an emergency, 182 (73%) indicated they would call 9-1-1, while 13 (6%) indicated that they would call 9-1-1 and take other action; an additional 8 (4%) indicated that they would do something else entirely. Of those who would take other action, four of 23 (19%) indicated that their response would “Depend on the circumstances” despite the fact that this had been identified as an emergency situation. For non-emergency responses, 38 respondents selected “Other” as a response, with eight (21%) of those indicating that their response would “Depend on the circumstances.” Finally, of twenty-one respondents who answered a question regarding their reasons for choosing multiple responses to a non-emergency situation, fourteen (67%) responded with wording which indicated, again, that it would depend on the situation.

Anticipated reactions to a specific emergency. The Perceived Emergency Index is constructed of items which question the willingness of the respondent to get involved in increasingly greater degrees of emergency. While only 75 of 190 (39%) respondents indicated a willingness to engage someone that appeared to be talking to him/herself in a store, almost all respondents (185, 99.0%) indicated willingness to get involved if they saw someone lying on

the sidewalk and blood was visible. In short, circumstances matter, and have some effect on triggering a willingness to take action on someone else's behalf.

Chapter 5: Discussion and Implications

Introduction

In this chapter a general discussion of the research project will be undertaken. Findings regarding literature-driven hypotheses will be considered as part of the overall research. Additional findings will be reviewed in light of the project. Limitations and challenges to the study will be discussed. Broad implications regarding the value of the research for social work in general, the use of social marketing and the Gatekeeper program in particular will be reviewed. Finally, future directions for further research will be considered.

Project Overview

The project as originally conceived was an investigation into the factors which might have an influence on prosocial behavior and more specifically on the behavior of citizens making referrals of others to social service agencies. A review of the literature revealed a wide range of overlapping concepts ranging from altruistic personality traits to the broad idea of social responsibility and the use of social marketing to further social goals such as the generation of prosocial behaviors. Further review of most of these models indicated significant limitations in addressing the specific behavior of interest. Discussions of altruism ranged from the very philosophic to suppositions regarding genetic personality traits. While philosophy may be useful in guiding exploratory qualitative research, it is of limited use in formulating quantifiable testable hypotheses. Likewise the concept of genetically driven altruistic personality traits suggests that humane behaviors may be predetermined and thus foreclose the possibility of identifying ways in which such behaviors might be enhanced. The adaptation of commercial marketing techniques to the promotion of prosocial behaviors was examined. Two

theories which have been used to support research or actual interventions and which appear to have application to this investigation are the Bystander Effect and the Theory of Planned Behavior. The Bystander Effect was examined for possible contributions, but research was directed mostly at behaviors which inhibited interventions, as suggested by the name, rather than factors which might encourage prosocial action. Studies of the Bystander Effect did indicate several ways in which it might be mitigated, one of which was gender. Based on this several demographic factors were examined for possible interaction with referring behaviors. The concept of social responsibility was considered as a possible driver for referring behaviors, but social responsibility may be construed as broadly as regular voting behavior, minding the speed limit, and keeping one's lawn mowed, none of which appears to have much of a direct connection to the target of interest, community members referring others to social service agencies. Because it proposes a model to address specific behaviors, Ajzen's Theory of Planned Behavior offers a suitable theoretical framework for investigating the referral phenomenon. However, because it is applied only to specific behaviors, the theory required construction of a test instrument specific to the behavior of interest. Ajzen provides instructions and examples for construction of such an instrument, so research was conducted using this model as a theoretical underpinning. As the behavior of interest can certainly be subsumed under the broader rubric of social responsibility the Abbreviated Social Responsibility Scale was used to provide both criterion validity, and support for a hypothesis relating referring behaviors to the broader concept of social responsibility.

Discussion of Hypotheses Testing

Discussion of Findings for Hypothesis 1

Hypothesis 1. Among community members who have not made referrals, gender, rurality, age, race and education will account for significant variance in intention to refer as measured by referral scale scores.

The findings did not support the hypothesis that any of the five demographic variables of interest (gender, age, race, education, and rurality) were related to intention to refer an older adult to a social service agency. Despite the suggestion of the Bystander Effect literature no relationship with gender was found. While the median age of the study population as a whole (69) was substantially older than the state median (40) (Migneault, 2013), there appeared to be no relationship between age and intention to refer. Education might have been expected to have some effect on intention to refer, if only because more education may have exposed people generally to a wider array of social service options, but there was no such effect visible in this study.

Finally, the possibility that living in a rural or non-rural environment might influence the intention to refer, perhaps because of some greater feeling of affinity, as suggested by the Bystander Effect studies, was also not supported in this study. However it should be noted that the identification of rurality versus urbanity was a rather coarse grading. Greater nuance in identifying locale might identify more influence. There is a hint here that a more finely parsed level of locale, such as one of those used by various government agencies might provide a better indication of the possible relationship of home locale and a willingness to refer other community members to a social service agency. Because these combine local street address

with other information, such as ZIP code, they may not be usable if the research design seeks to protect the anonymity of research participants, such as the present one.

The implication of all these findings regarding demographics is that there would currently be no advantage in singling out people with any sub-set of these demographic characteristics, at least as measured here, to be targeted for a campaign to increase referrals to a social service agency.

Despite the fact that none of the demographic characteristics investigated in this study were found to have a significant effect, it is possible that an alternate approach might identify such effects. While it is believed that the significance of age and race on the response to statement 18 (“hard for me to get involved”) as shown in Table 3 were artifacts of the group composition, it is possible that there is some effect here. The mild negative correlation with age may reflect the attitudes of people who made referrals, who have a lower mean age than the other groups and are still largely in the workforce. The rising trend in groups on Social Service Agency Referral Scale scores, with lowest score for the Community Group and highest score for the Referral Group as shown in Table 3, suggest that there is a relationship with some broader theme, such as a willingness to be involved socially.

Discussion of Findings for Hypothesis 2

Hypothesis 2. The intention to refer will be different among study groups, specifically, the Training Group and Referred Group will have a higher intention to refer than the general Community Group.

There is no evidence to support the hypothesis that there was any difference between any of the three survey groups of intention to refer to a social service agency, as measured by

the Social Service Agency Referral Scale. What was found, however, is that the people who come for Gatekeeper training have a higher level of involvement in the community as measured by their membership in civic organizations. As noted in the presentation of findings regarding civic organization membership, there were significant differences between Training Survey group members and the Community and Referral Survey members combined. Thus, civic organization membership seems to be a factor which could be used to better promote social service agency referral campaigns which require a significant educational effort. The broad implication of this for social work is that promoting educational programs which have the aim of increasing referrals to a social service agency might be better pursued by recruiting members of civic organizations. The more specific implication of this for the current Gatekeeper Program and programs like it is that educational promotion to civic organizations as it is currently practiced is a viable and defensible activity.

Discussion of Findings for Hypothesis 3

Hypothesis 3. Following training, community members who have not previously referred will have higher scores in perceived behavioral control than prior to the training.

Substantial evidence was found to support Hypothesis 3. Perceived behavioral control involves elements of empowerment which include knowledge of actions which could be taken under a specified set of conditions. Gatekeeper training seeks to increase awareness of possible conditions wherein an older adult would benefit from the assistance of a social service agency, then provides information as to how such an agency may be contacted and someone such as an older adult referred. Providing information about possible referring behaviors and demonstrating those behaviors via an audiovisual presentation are intended to reinforce the

perception that there is something anyone can do if a senior is seen to be in need. The fact that the paired samples t-test has a high level of statistical significance suggests strongly that there are real differences between the pre- and post-training perceived behavioral control conditions.

The literature supports the idea that knowledge of a possible action which can be taken makes the action more likely. Educating people regarding possible behaviors in particular situations would be expected to increase the likelihood that they might engage in that behavior, if only because they became aware of it as a possibility. The implication of this finding for both social work generally and the Gatekeeper Program in particular is that training can work. In this case, the Gatekeeper training, as provided, increased the perceived behavioral control of the individuals trained, and thus increased their intention to make a referral to a social service agency, in the case of the Gatekeeper Program, if they saw an older adult who appeared to be in need of assistance. Providing public education about a particular social service agency program, such as the Gatekeeper Program, can be expected to increase the intention to make a referral to that program, and ultimately, as supported by the literature, to actually engage in the action of making a referral.

Discussion of Findings for Hypothesis 4

Hypothesis 4. There will be a significant moderating effect (interaction effect) of referral intention and level of perceived emergency in predicting behavior.

The logistic regression performed using the Social Service Agency Referral Scale score, the Perceived Emergency Index and their product found no significant interaction. Therefore, intention to refer does not appear to interact with level of perceived emergency in a positive and significant way, as hypothesized. What this finding may really address is the question of

circumstances. An analysis of the “Other” category for possible responses to a situation which was not clearly an emergency suggested that the circumstances were a major factor; 20% of the respondents provided answers which were classified as “it depends.”

The apparent disconnection between intention to refer, as measured by the Social Service Agency Referral Scale, and the level of perceived emergency may reflect one of the challenges of encouraging prosocial behavior in general: connecting the desire to “do the right thing” with a particular action, such as “If you see something, say something.” One implication of this finding for the Gatekeeper Program and from a broader social work perspective is that use of graduated scenarios as part of training might be an effective way to increase sensitivity to circumstances which would produce a referral to a social service agency, and thus lower the “trigger point” where such an action might occur. Lowering the trigger point for activity should result in an increase in the rate of referrals, the target behavior of this study. Providing explicit examples of circumstances where referrals were appropriate would directly address the reluctance of individuals to make referrals due to ambiguity surrounding the circumstances, clarify the conditions where a referral was appropriate and should be undertaken, and reduce the number of situations where an individual failed to act because of insufficient information, thus addressing the “it depends” reluctance to take action.

Discussion of Findings for Hypothesis 5

Hypothesis 5. Intention to refer to social service agencies is positively correlated with social responsibility.

Intention to refer to a social service agency is positively correlated with social responsibility, as measured by the Social Service Agency Referral Scale and the Abbreviated

Social Responsibility Scale, and further supported by the investigative analysis using the single statements, 18 and 29, as measures of intentionality, which were consistent with this. The specific intention to make a referral to a social service agency may be seen as falling under the broad umbrella of social responsibility, which is reflected in the finding regarding this hypothesis. The willingness to make a referral is very specific, as contrasted to the broader personality traits which might be measured by the Abbreviated Social Responsibility Scale. Nonetheless, the Abbreviated Social Responsibility Scale may be seen as reflective of two legs of Azjen's model: subjective norms and attitude toward the behavior. Statements like "It is the duty of each person to do his/her job the very best he/she can" could be taken as reflecting a very broad subjective norm, whereas "People would be better off if they could live far away from other people and never have to do anything for them" reflects an attitude toward the behavior of "doing something" for others, a socially responsible behavior. Seen in this light, it makes sense that there would be a significant correlation between the Abbreviated Social Responsibility Scale and the Social Service Agency Referral Scale.

These findings are also intriguing in suggesting that there might be two different pathways to action. The first may occur at some basic biological level, circumstances in which almost everyone would be motivated to take action. Rushton (1984; 1989; 1991) argued strongly for the idea that altruism, however defined, was a survival characteristic for *Homo Sapiens*.

Standing in contrast to this are findings from studies of the Bystander Effect which suggest that there may be an increase in helping behaviors when group identity is salient (Levine & Crowther, 2008), or there is the possibility of future interaction among bystanders

(Gottlieb & Carver, 1980) or there is a sense of cohesiveness (Latané & Darley, 1970; Rutkowski et al., 1983), all of which are purely social factors. The strength of these social factors in mitigating Bystander Effect suggests that there may in fact be an alternate pathway to helping behaviors which is learned and/or influenced by other social factors, such as group norms. If someone grows up in a family or culture which rejects interaction with “outsiders,” the willingness to become involved with someone as depicted in the lesser emergencies of the Perceived Emergency Index, such as talking to oneself, is understandable. The existence of these two different pathways to prosocial behavior may help explain the “tipping point” phenomenon where almost everyone reports that they would take action to help someone else.

Limitations

One of the limitations of this study lies in the presumption that referral to a social service agency of someone in need is a desirable thing, and inherently socially responsible. This may be a cultural bias, and not be reflected in all other cultures, some of which may place a value on non-interference with another’s life. Under these circumstances a low score on the Social Service Agency Referral Scale may not reflect a lack of social responsibility, the topic under investigation, but its opposite. This possibility is important for any future efforts to extend the use of this scale.

Because of practical limitations due to constrained resources it was not possible to support predictive validity or external validity for the Social Service Agency Referral Scale developed for this study.

An attempt was made to obtain geographic representation by conducting one base-line Community Survey in each of Connecticut’s eight counties. Of all respondents 13% were

classified as rural, whereas the state as a whole is considered to have about 5% rural population (RUCA Rural Health Research Center – data, n.d.), so the survey was somewhat overweight in rural representation. An attempt was made to achieve balanced racial and ethnic representation by including inner city senior centers. African-Americans were over-represented, comprising 51 of 249 respondents (20%) versus actual state population of 10% (Town profiles - State of Connecticut - CERC regional profile 2012, 2012). The Latino/a population was underrepresented, comprising only eight of 249 respondents (3%), whereas the statewide representation is 14%. Such distortions may limit the generalizability of study results.

The Community and Training Groups in particular, and the total survey population as a whole were an older cohort. While this helped achieve the goals of the study, it may limit the generalizability of results to populations of differing mean age.

Substantial numbers of respondents failed to complete enough items to permit use of their data. Three factors were noted that may have contributed: the casual method of recruitment; the information sheets (Appendix D) emphasizing that participation was optional and that “You do not have to answer any question that you do not want to answer for any reason,” and finally that participants were not rewarded or compensated for their participation, which may have lessened the importance to them of completing the survey. Another possible factor in failure to complete surveys may have been a lack of connection to the outcome, as the student researcher was not a member of any of the communities surveyed. Social cohesiveness has been shown to be a powerful factor in reducing “frailty” in the older adults, and thereby increasing their efficacy and sense that their efforts matter (Cramm & Nieboer, 2013)

As noted previously, a lack of cultural relevance may have been a factor in the high level of attrition for the Social Service Agency Referral Scale among non-white people in the Community and Training Groups. Failure to take steps to insure the cultural relevance of questions on the Social Services Agency Referral Scale to the African-American community was a short-coming of this study. By extension, if a Spanish-language version of the scale should be developed the actual cultural relevance of the questions after translation would be a matter for investigation.

Another possible reason for non-completion of the survey may simply have been that it was too long. The Community Survey, for example, consisted of nine demographic questions and 33 investigative questions. Several people wrote on the survey that it was “too long”. In practice runs, people typically completed the survey in 10-15 minutes, but this may have been too much time to ask of an older population without providing some tangible reward. Also, the Community and Training Surveys were usually administered prior to lunch, and may have been perceived as an impediment to being fed.

The Guttman-style Perceived Emergency Index was not independently validated. Further, the six elements of the scale do not all increase in a consistent manner as would be expected with a classic scaled-index question, limiting its further use.

Modifications to the Abbreviated Social Responsibility Scale may have altered its reliability or validity. The means by which the authors assessed its consistency were not published and so cannot be verified with the modifications employed here. Further, the study substantiating it is more than 50 years old, and language and cultural changes since then may

have affected its efficacy. These factors may interact to affect the generalizability of the finding related to Hypothesis 5.

There was no screening process for participation in either the Community or Training Surveys. Consequently there may have been issues with the recruited populations which were not accounted for, such as dementia, poor vision, or reading comprehension.

Future Directions for Research

The current project raises several points of interest for further research. Some have to do with Connecticut's diverse population; others are suggested by non-significant findings which may bear further investigation.

It is possible that the failure to find significant differences in intention to refer between the three survey groups is related to a pre-existing bias toward prosocial behavior, as the members of the first two survey groups were all recruited at local senior centers, and members of the Referral group demonstrated prosocial behavior. Participation at a local senior center might signal greater socialization and this might be related to prosocial attitudes. Consequently, further research should include older adults who did not participate at senior centers.

The lack of participation by Hispanic citizens is an obvious challenge. With about one out of seven Connecticut residents classified as Hispanic, this is too large a population to fail to consider. With sufficient resources a baseline validation of the Social Service Agency Referral Scale could be translated into Spanish and administered to an appropriately representative portion of the State's Hispanic population to validate the instrument for this population as well. As noted above, the mere translation of the scale into Spanish would not be sufficient to insure cultural relevance of the statements contained in the scale. At the least a varied group of native

Spanish-speakers from different countries should be consulted regarding the appropriateness of the translated material toward measuring one of the dimensions of the Theory of Planned Behavior.

The Social Services Agency Referral Scale might be useful in helping to determine the probable success of a social work campaign which relied on agency referrals by community members. It would be illuminating if the instrument could be employed predictively in such a campaign to further establish its usefulness.

There are a number of programs similar to Connecticut's current Gatekeeper Program in current operation in other parts of this country and Canada. It could be valuable to use the Social Services Agency Referral Scale to compare groups which had made referrals to other similar Gatekeeper programs to the Connecticut Referral Survey population to further establish the tool's validity and reliability and also to assess the extent to which the findings of this study can be generalized. The QPR suicide prevention program, frequently identified as the QPR Gatekeeper program, also relies on community members to make referrals in order for it to be successful. The program trains people in a uniform way, and states that it had trained over a million people by 2009 (What is QPR? 2011). Because of the relatively large numbers of potential subjects and the uniformity of the training, this could be a mechanism for testing the predictive ability of the Social Services Agency Referral Scale, by administering it at training and then tracking referrals.

The relative strength of the Cronbach's alpha statistic suggests strong internal consistency. It would be relatively straightforward to adapt the scale to measure intention to

refer in relation to other special populations such as veterans, youth, and similar populations simply by replacing the phrase “older adults” with the population of interest where appropriate.

The potential relationship between race and survey group for the single Social Service Agency Referral Scale item “wouldn’t hesitate to make a call” (identified as statement 18 on the Community Survey) would bear further investigation. It is possible that the statement could serve as a very brief screen for intention to refer in the context of another questionnaire or survey instrument.

The apparently consistent results of using statements 18 and 29 from the Community Survey in place of the Social Service Agency Referral Scale for Hypothesis 5 bear further investigation. A slight correlation of statement 18 with the Abbreviated Social Responsibility Scale would be expected as part of a broad set of personality traits which would include such behavior. Reasons for the stronger correlation of statement 29 with the Abbreviated Social Responsibility Scale are not obvious, and not supported by any of the literature reviewed for this study; it suggests that additional research might be undertaken to better understand this relationship. It may be that the overall scale is more subject to a social responsibility response bias.

While rurality was not significant as a determinant of referral intention as measured by the Social Services Agency Referral Scale, the degree of difference in significance between it and other measures suggested that there might be some identifiable determinant related to locality. There appeared to be a trend toward increasing rurality in the three groups, from only 8% of the Community Group to 14% of the Training Group to 22% of the Referral Group. Use of finer measures of locality, such as those employed by federal agencies (What is rural? 2013),

might establish a relationship between referring intention and locality. These federal classifications typically require use of an actual street address, which would require more stringent controls to protect the anonymity of survey participants than could be accomplished within the scope of this research project.

The relatively high incidence of civic organization membership by people participating in the Training Survey was intriguing. Further research might attempt to identify particular factors in this sub-population which could add predictive value to the Social Services Agency Referral Scale, such as depth of social networking or affinity factors which may affect their referring behavior.

The suggestion that there might be two distinct pathways to prosocial behavior should be pursued. Social psychology has been stymied by ambiguous and sometimes conflicting findings in regard to altruistic/prosocial behaviors. If there are in fact two (or more) different pathways to such behaviors it would be a significant finding and contribution.

As part of the literature review for this study, it was discovered that there have been at least 236 efforts made to implement the Gatekeeper model. As far as can be determined, the vast majority of these efforts are no longer under way; at best, less than 35 could be identified with any certainty. As social workers have been key to many of these efforts, it would be intrinsically worthwhile as part of the historic record of social work to document these programs before all traces are lost. Pursuing this point, it would be a valuable service to determine what common elements, if any, are shared by the Gatekeeper programs which have been in existence for more than ten years with an eye to being able to sustain other such endeavors.

Significance for the Gatekeeper Program

There were a number of findings which are potentially significant for the current Connecticut Gatekeeper Program. The first is that the program is probably not addressing the significant portion of Connecticut's population which is Hispanic. Funding is certainly a major factor in this, but the failure to address this vulnerable population represents a fundamental social work value and concern. The second finding is that the program, as it exists, is apparently successful in influencing the factor in intention to refer which is most malleable: perceived behavioral control. Following Gatekeeper Training, respondents displayed a statistically significant increase in this factor, and thus the aggregate score of intention to refer as measured by the Social Service Agency Referral Scale. Finally, the research suggests that it might be possible to further increase perceived behavioral control by presenting a series of scenarios as part of the training which would encourage trainees to make a referral under conditions which the public might consider as less than dire. For example, almost everyone would take action if they saw someone bleeding, but fewer people would take action if they saw an older adult they did not know sitting on the sidewalk. The goal of such training would be to encourage people to take action when specific circumstances were recognized, instead of waiting for a set of contextual cues which might resolve the answer to the conditional "it depends ...". Finally, there appears to be some support for the practice of targeting civic organizations for Gatekeeper or other training aimed at increasing referral behavior.

Significance for Social Work

Further use of the Social Service Agency Referral Scale may prove useful when planning social marketing campaigns to try to improve awareness and use of social

serviceagency services by testing the potential referral behavior of the target audience. For example, if a mental health agency targeted high school guidance counselors to refer troubled teens to an innovative evidence-based program, it would be worthwhile to measure their willingness to make a referral to such a program. This could be done by obtaining their responses to the Social Service Agency Referral Scale after exposure to a social marketing message and comparing the results to some control group. If the target audience is not likely to make a referral then perhaps the funds intended for the publicity campaign might be better spent elsewhere, or a different social marketing message might be developed using traditional marketing techniques.

The availability of a tool such as the Social Service Agency Referral Scale should be taken into account when developing policies which involve community-professional interactions. The tool makes it possible to identify with some accuracy the probability that the targeted members of the private sector will in fact engage with the professional resource, an outcome which has substantial economic implications for policy-makers.

One of the discoveries of this study is that the act of referring by the public has not been a subject of scholarly research. One of the most fundamental and frequently performed tasks in medical practice is the making of referrals (Choudhry, Liao, & Detsky, 2014). The medical profession has indicated an awareness of the importance of the making of medical referrals and has done some research on the process; it has been estimated that each older adult in the U.S. receives an average of two referrals to a specialist per year (Shea, Stuart, Vasey & Nag. 1999), which makes the process an important one for gerontologists. However, the process is flawed, and at least one recent study stated that “There are breakdowns and inefficiencies in all

components of the specialty-referral process” (Mehrotra, Forrest, & Lin, 2011, p. 46). Thorsen, Hartveit and Baerheim have identified specific issues regarding referral-making by general practitioners to specialists (2012). There has been some attempt to address referral making as a social networking issue (Almansoori, et al., 2014) and has also been studied in regard to referrals for specific types of medical needs, such as hip and knee surgery (Fyie, Frank, Noseworthy, Christiansen, & Marshall, 2014), depression in obstetric settings (Flynn, Henshaw, O’Mahen, & Forman, 2010), and cardiology referrals (Bjornsson, Sigurdsson, Svavarsdottir & Gudmundsson, 2013). In short, there is awareness of the professional-to-professional referral process in medicine, though there is little in the literature to support concerns about non-professional to professional referrals, which was the subject of this study. This suggests that public health practitioners could profitably explore this area; the Social Service Agency Referral Scale might be used to help identify potentially successful campaigns with little or no modification.

Based on the available literature, the social work profession has paid relatively little or no attention to this area. A recent survey of the literature failed to identify a single article concerned with social and the referral process. As the process of referral is an integral part of case management in many situations it is of considerable value to the social work profession and should be identified specifically as a tool for practitioners. To that end, the tools to identify appropriate community resources and appropriate methods for the making of referrals should be considered for inclusion in the curricula of social work schools.

The Theory of Planned Behavior has been used extensively in areas such as public health which are of traditional and related interest to the concerns of social work. However, it

has not been used much to date for studies which are directly related to social work. Therefore, use of the theory for this study extends the scholarly range of the theory as well as bringing a valuable new tool to bear on a social work concern, the behavior of making referrals of others to social service agencies by community members. Its employment in this study may also serve to help educate others in the social work community to the utility of the Theory of Planned Behavior, and encourage its use in examining a range of other specific behaviors of interest to social work. Finally, it provides a valuable instrument for assessing intention to make referrals of others to a social service agency by community members which may be used in future assessments of potential social welfare programs to determine their likelihood of success with a particular target population. The fact that the score on the perceived behavioral control sub-scale was increased significantly by Gatekeeper training suggests that use of this sub-scale alone might be used to test the effectiveness of various sorts of social marketing training programs as a quick before and after measure of the effectiveness of a particular training session, after a credible baseline for the three-sub-scale instrument had been established. Finally, use of the Theory of Planned Behavior in support of a social marketing campaign represents an additional contribution to social work, which relies heavily on such programs to bring about broad-based social change.

In summary, this study makes a valuable contribution to social work by demonstrating the use of a powerful model, the Theory of Planned Behavior, for understanding the likelihood that people will engage in a particular behavior. The study benefits the current Gatekeeper Program by supporting the educational effort which improves perceived behavioral control. The study may help shape policy within the State of Connecticut. More importantly, as efforts are

made to devise a variety of programs throughout the U.S. which are evidence-based this study demonstrates use of a tool which may be readily adapted by social workers to explore the likelihood of their success, which has broad implications for policy makers. This study also suggests the utility for social work education of teaching a theory or model which may be used in practice; the Theory of Planned Behavior is sparse, comprehensive, and readily operationalized. Its inclusion in social work curricula would provide a useful tool for social workers who are increasingly called upon to prove the worth of their work. Finally, this study makes a significant contribution to an understanding of the many factors which may influence pro-social behaviors.

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Appendix A: Institutional Review Board Approval Letter



DATE: December 18, 2013

TO: Brenda Kurz, Ph.D.
Dwight Norwood, MSW, Student Investigator
School of Social Work

FROM: Deborah Dillon McDonald, RN, Ph.D. *DDM/kw*
Chair, Institutional Review Board
FWA# 00007125

RE: Protocol #H13-320: "Community Members Referring Other to Social Service Agencies"
Please refer to the Protocol# in all future correspondence with the IRB.
Funding Source: Departmental Funds
Approval Period: From: December 18, 2013 Valid Through: December 18, 2014
"Expiration Date"

On December 12, 2013, the Institutional Review Board (IRB) reviewed the above-referenced research study by expedited review and determined that modifications were required to secure approval. Those requirements have been met, and the IRB granted approval of the study on December 18, 2013. The research presents no more than minimal risk to human subjects and qualifies for expedited approval under category #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. Enclosed are the validated information sheets, which are valid through December 18, 2014. **A copy of the approved, validated information sheet (with the IRB's stamp) must be used to consent each subject.**

Per 45 CFR 46.117(c)(2), the IRB waived the requirement for the investigator to obtain a signed consent form for the subjects because it found that 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. The principal investigator must notify the IRB immediately of any changes that may affect the status of the research study referenced above.

All investigators at the University of Connecticut are responsible for complying with the attached IRB "Responsibilities of Research Investigators."

Re-approval: It is the investigator's responsibility to apply for re-approval of ongoing research at **least once yearly**, or more often if specified by the IRB. The Re-approval/Completion Form (IRB-2) and other applicable re-approval materials must be submitted **one month** prior to the expiration date noted above.

Modifications: If you wish to change any aspect of this study, such as the procedures, the consent forms, the investigators, or funding source, please submit the changes in writing to the IRB using the Amendment Review Form (IRB-3). All modifications must be reviewed and approved by the IRB **prior to** initiation.

Office of the Vice President for Research
Research Compliance Services
439 WHITNEY ROAD EXTENSION, UNIT 1246
STORRS, CT 06269-1246
PHONE 860.495.8802
FAX 860.495.1044
compliance@uconn.edu

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Appendix B: Institutional Review Board Amendment Approval



DATE: January 23, 2014

TO: Brenda Kurz, Ph.D.
Dwight Norwood, MSW, Student Investigator
School of Social Work

FROM: Jaci L. VanHeest, Ph.D. *JLVH/nw*
Chair, Institutional Review Board
FWA# 00007125

RE: Protocol #H13-320: "Community Members Referring Other to Social Service Agencies"
Please refer to the Protocol# in all future correspondence with the IRB.

The request for approval of an amendment received January 20, 2014 for the above-referenced protocol was approved by the Institutional Review Board (IRB) on January 23, 2014. This amendment is eligible for expedited review under 45 CFR 46.110(b)(2): minor changes in previously approved research during the period (of one year or less) for which approval is authorized.

The amendment includes changes to the questionnaire:

1. Addition of question #8 to capture number of referrals.
2. Change of wording to question #9 to reflect possibility that multiple referrals were made.
3. Changed numbering of the remaining questions.

Amendment Approval Date: January 23, 2014
Approval is Valid Until: December 18, 2014

Please keep this Amendment Approval letter with your copy of the approved protocol.

Attachments:

1. Validated IRB-3 Amendment Review Form

Office of the Vice President for Research
Research Compliance Services
438 WHITNEY ROAD EXTENSION, UNIT 1246
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Appendix C: Recruitment Materials

Community Survey Announcement

Sample Community Survey Announcement

[Day of the week][Month][Day] from [Time] to [Time] Dwight Norwood, a graduate student researcher at the University of Connecticut School of Social Work will be present at the [Name] Senior Center to solicit attendees to complete a brief anonymous survey. The survey may help improve services to older adults. Participants will not be paid but will be given a cell-phone screen cleaner as a token of appreciation for completing the survey. No personal identifying information will be collected. Participation is entirely voluntary. For further information contact Dwight Norwood at 860-882-9207.

Community Survey Recruitment Poster

UConn Community Survey

Take a few minutes to fill out this survey and get a free screen cleaner for your cell phone! No personally identifying information collected.

Gatekeeper Training Announcement

Sample Gatekeeper Training Announcement

[Day of week][Month][Date] at [Time] St. Luke's Eldercare Services will present the Gatekeeper Program at the [Name] Senior Center. The Gatekeeper Program seeks to educate members of the community who regularly come into contact with seniors to signs of potential behavioral

health issues. Upon noticing such a sign community members are encouraged to make a completely confidential referral to St. Luke's Eldercare Services where a trained social worker will follow up with the senior to see if there are any resources which may help them to remain safely in their own home. The Program is presented through a brief PowerPoint presentation which explains why the program is needed, followed by a short video which depicts some of the possible signs of failure in an older citizen. Character parts in the video are played by Connecticut residents. The Gatekeeper Program is funded primarily through a grant from the Connecticut Department of Mental Health and Addiction Services. This program is intended for anyone who comes into contact with seniors regularly. Dwight Norwood, a graduate student researcher at the University of Connecticut School of Social Work, will make the presentation. Attendees will be requested to participate in a brief anonymous survey which may help improve services to older adults. Participation is voluntary; anyone may attend the presentation without participating in the survey. No personal identifying information will be collected. People who participate in the survey will not be paid, but they will receive a cell-phone screen cleaner as a token of appreciation. If you have questions about the survey you may contact Dwight at 860-882-9207.

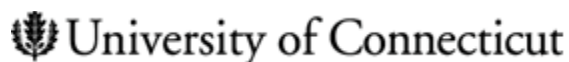
Gatekeeper Training Survey Participant Recruiting Script.

Hello, my name is Dwight Norwood. I am a doctoral candidate at the University of Connecticut School of Social Work. Part of my regular job is educating people about the Gatekeeper Program for St. Luke's Eldercare Services. I also act as a consultant on the Gatekeeper Program

to other agencies in the state. As part of the research for my dissertation I am collecting information about Gatekeeper training. I am requesting your participation in this research by completing a brief survey before and after the presentation. The survey contains no personal identifying information. If you choose to participate you do not have to complete the whole survey, though I hope that you will. Please do not add any personal identifying information to the survey! Please detach the last page of the survey and save it to be answered after my presentation. After completing the first part of the survey please detach it and place it in a large manila envelope which will be passed around. After the presentation please complete the second part of the survey and place that in the manila envelope which will be passed around. A sample of adults completed this survey in an average of less than 10 minutes. Your participation in this survey is valuable because it may help improve the Gatekeeper Program. Do you have any questions?

Appendix D: Information Sheets

University of Connecticut School of Social Work



Community Survey

Information Sheet

Principal Investigator: Brenda Kurz**Student: Dwight Norwood****Title of Study: Community Members Referring Others to Social Service Agencies**

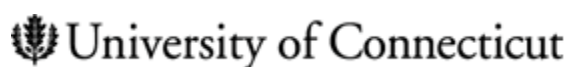
You are invited to participate in this survey of people using this senior center. I am a graduate student at the University of Connecticut, and I am conducting this survey as part of my course work. I am interested in finding out more about social service agency referrals for older adults.

Your participation in this study will require completion of the attached questionnaire. This should take approximately 10 minutes of your time. Your participation will be anonymous and you will not be contacted again in the future. You will not be paid for being in this study, but you will be given a screen cleaner for a cellphone as a token of my appreciation. This survey does not involve any risk to you. However, the benefits of your participation may impact society by helping increase knowledge about social service agency referrals for older adults.

You do not have to be in this study if you do not want to be. You do not have to answer any question that you do not want to answer for any reason. We will be happy to answer any questions you have about this study. If you have further questions about this project or if you have a research-related problem, you may contact me, Dwight Norwood (the student) at 860-882-9207 or my advisor, Prof. Brenda Kurz at (860) 570-9153. If you have any questions about your rights as a research participant you may contact the University of Connecticut Institutional Review Board (IRB) at 860-486-8802. The IRB is a group of people who review research studies to protect the rights and welfare of research participants.

Please complete the accompanying survey and return it by placing it in the large manila envelope. Thank you.

PLEASE DO NOT PUT ANY PERSONALLY IDENTIFYING INFORMATION ON THE SURVEY.

University of Connecticut School of Social Work**Gatekeeper Training Survey Information Sheet****Principal Investigator: Brenda Kurz****Student: Dwight Norwood****Title of Study: Community Members Referring Others to Social Service Agencies**

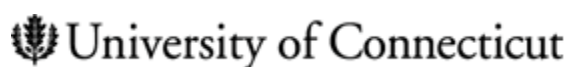
You are invited to participate in this survey of people receiving Gatekeeper training. I am a graduate student at the University of Connecticut, and I am conducting this survey as part of my course work. I am interested in finding out more about social service agency referrals for older adults.

Your participation in this study will require completion of the attached questionnaire. This should take approximately 10 minutes of your time. Your participation will be anonymous and you will not be contacted again in the future. You will not be paid for being in this study, but you will be given a screen cleaner for a cellphone as a token of my appreciation. This survey does not involve any risk to you. However, the benefits of your participation may impact society by helping increase knowledge about social service agency referrals for older adults.

You do not have to be in this study if you do not want to be. You do not have to answer any question that you do not want to answer for any reason. We will be happy to answer any questions you have about this study. If you have further questions about this project or if you have a research-related problem, you may contact me, Dwight Norwood (the student) at 860-882-9207 or my advisor, Prof. Brenda Kurz at (860) 570-9153. If you have any questions about your rights as a research participant you may contact the University of Connecticut Institutional Review Board (IRB) at 860-486-8802. The IRB is a group of people who review research studies to protect the rights and welfare of research participants.

Please complete the accompanying survey and return it by placing it in the large manila envelope. Thank you.

PLEASE DO NOT PUT ANY PERSONALLY IDENTIFYING INFORMATION ON THE SURVEY.

University of Connecticut School of Social Work**Referral Survey****Information Sheet****Principal Investigator: Brenda Kurz****Student: Dwight Norwood****Title of Study: Community Members Referring Others to Social Service Agencies**

You are invited to participate in this survey of people who have made referrals to the Gatekeeper Program. I am a graduate student at the University of Connecticut, and I am conducting this survey as part of my course work. I am interested in finding out more about social service agency referrals for older adults.

Your participation in this study will require completion of the attached questionnaire. This should take approximately 10 minutes of your time. Your participation will be anonymous and you will not be contacted again in the future. You will not be paid for being in this study, but you will be given a screen cleaner for a cellphone as a token of my appreciation. This survey does not involve any risk to you. However, the benefits of your participation may impact society by helping increase knowledge about social service agency referrals for older adults.

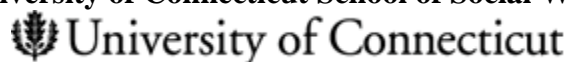
You do not have to be in this study if you do not want to be. You do not have to answer any question that you do not want to answer for any reason. We will be happy to answer any questions you have about this study. If you have further questions about this project or if you have a research-related problem, you may contact me, Dwight Norwood (the student) at 860-882-9207 or my advisor, Prof. Brenda Kurz at (860) 570-9153. If you have any questions about your rights as a research participant you may contact the University of Connecticut Institutional Review Board (IRB) at 860-486-8802. The IRB is a group of people who review research studies to protect the rights and welfare of research participants.

Please complete the accompanying survey and return it by placing it in the large manila envelope. Thank you.

PLEASE DO NOT PUT ANY PERSONALLY IDENTIFYING INFORMATION ON THE SURVEY.

Appendix E: Community Survey

University of Connecticut School of Social Work



Community Survey

-
1. What is your gender (check one)? ☐ Male ☐ Female
2. How old are you? (years) 3. Your ZIP code _____
4. Highest level of education completed (check one):
☐ Elementary ☐ High school ☐ 2-year college ☐ 4-year college ☐ Graduate
5. What race do you consider yourself to be? (check all that apply)
☐ White ☐ Asian ☐ African-American/Black ☐ Native American
☐ Multi-Racial ☐ Other ☐ Not Known
6. Are you Spanish/Hispanic/Latino? ☐ Yes ☐ No
7. How many civic or charitable organizations do you belong to? (number)
8. Have you received Gatekeeper training? ☐ Yes ☐ No
9. Have you made a referral to the Gatekeeper program? ☐ Yes ☐ No

For the rest of the survey, “older adults” refers to people 60 and older.

10. If you encountered or learned of an older person who was clearly experiencing an emergency, what would you most likely do?
☐ Call 9-1-1
☐ Other - please explain _____
-
11. If you encountered or learned of an older person who was experiencing difficulty and needed help, but it was not an immediate emergency, what would you do? (check all that apply)
☐ Call 9-1-1
☐ Call the non-emergency police number
☐ Call the Municipal agent

- ☐ Call DSS Elderly Protective Services
- ☐ Call the Gatekeeper Program
- ☐ Call 2-1-1
- ☐ Other - please explain
-

11b. If you checked more than one, please explain the circumstances for each. In other words, how would you decide which number or program to call?

Please think carefully about each of the following statements then check either “Yes” or “No”.

12. If I saw an older adult who was a stranger wandering a store talking to him/herself I would do something.	<input type="checkbox"/> Yes <input type="checkbox"/> No
13. If I saw an older adult who was a stranger wandering a store who appeared to be intoxicated I would do something.	<input type="checkbox"/> Yes <input type="checkbox"/> No
14. If I saw an older adult who was a stranger sitting on the sidewalk I would check to see if he/she was okay.	<input type="checkbox"/> Yes <input type="checkbox"/> No
15. If I saw an older adult who was a stranger sitting on the sidewalk who had been sick I would check to see if he/she was okay.	<input type="checkbox"/> Yes <input type="checkbox"/> No
16. If I saw an older adult who was a stranger lying on the sidewalk not moving I would check to see if he/she was okay.	<input type="checkbox"/> Yes <input type="checkbox"/> No
17. If I saw an older adult who was a stranger lying on the sidewalk not moving and I could see blood I would call an emergency number such as 9-1-1.	<input type="checkbox"/> Yes <input type="checkbox"/> No

In the following, we ask you to think about a variety of statements. In each case, you are asked to think about the extent to which you disagree or agree with the statement. For each statement, circle the one number that corresponds most closely to your feeling from 1- Strongly Disagree to 7 -Strongly Agree .

18. I wouldn't hesitate to make a call about an older adult who seemed to be experiencing difficulty.

Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree

19. Most of my friends/neighbors would approve of making a call about an older adult experiencing difficulty.

Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree

20. It's up to me whether or not I do something, like making a call, about an older adult I believe is in trouble.

Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree

21. It is no use worrying about current events or public affairs; I can't do anything about them anyway.

Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree

22. Most of my friends/neighbors believe that we have a responsibility to take action, like making a call, if we see an older adult in trouble.

Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree

23. My best friend would make a call if he/she saw an older adult experiencing difficulty.

Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree

24. Our country would be better off if we had fewer elections.

Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree

25. Making a confidential call about an older adult who was experiencing difficulty would be an invasion of privacy.

Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree

26. Most of the people I respect would make a call about an older adult experiencing difficulty.

Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree

27. Letting your friends down occasionally is not so bad because you can't do good all the time for everybody.

Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree

28. I would feel obligated to make a call about an older adult if he/she appeared to be experiencing difficulty.

Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree

29. If I saw an older adult in difficulty, it would be hard for me to get involved, even by making a confidential call .
Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree
30. It is the duty of each person to do his/her job the very best he/she can.
Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree
31. I could really help an older adult who was experiencing difficulty just by making a confidential call.
Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree
32. Helping people we don't know personally is a sign of social responsibility.
Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree
33. People would be better off if they could live far away from other people and never have to do anything for them.
Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree
34. If I saw an older adult who appeared to be experiencing difficulty there is nothing stopping me from making a call for help.
Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree
35. If I were over 60, experiencing difficulty, and didn't know where to turn I would appreciate someone making a call about me.
Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree
36. At school or work I usually volunteered for special projects.
Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree
37. If I saw an older adult in trouble there would always be something that I could do, such as make a call.
Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree
38. If I saw an older adult having difficulty, making a call would be an act of kindness /compassion.
Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree
39. Every person should give some of her/his time for the good of her/his town or country.
Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree
40. Making a call about people who are in difficulty is part of good citizenship.
Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree
41. Most of my friends/neighbors feel that the right to privacy is more important than getting an older adult help, such as by making a call, if they appear to be experiencing difficulty.
Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree

42. I feel very bad when I have failed to finish a job I promised I would do.

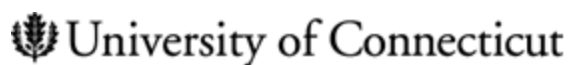
Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree

43. The person I respect the most believes that social service programs play an important role in the community.

Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree

Thank you ! Your participation in this survey may help improve services to older adults.

Appendix F: Training Survey



Gatekeeper Training Survey

Pre-test

1. What is your gender (check one)? ☐ Male ☐ Female
2. How old are you? (years) 3. Your ZIP code _____
4. Highest level of education completed (check one):
☐ Elementary ☐ High school ☐ 2-year college ☐ 4-year college ☐ Graduate
5. What race do you consider yourself to be? (check all that apply)
☐ White ☐ Asian ☐ African-American/Black ☐ Native American
☐ Multi-Racial ☐ Other ☐ Not Known
6. Are you Spanish/Hispanic/Latino? ☐ Yes ☐ No
7. How many civic or charitable organizations do you belong to? (number)
8. Is this your first Gatekeeper training session? ☐ Yes ☐ No
9. Have you made a referral to the Gatekeeper program? ☐ Yes ☐ No

For the rest of the survey, “older adults” refers to people 60 and older.

10. If you encountered or learned of an older person who was clearly experiencing an emergency, what would you most likely do?
☐ Call 9-1-1
☐ Other - please explain

11. If you encountered or learned of an older person who was experiencing difficulty and needed help, but it was not an immediate emergency, what would you do? (check all that apply)
☐ Call 9-1-1
☐ Call the non-emergency police number
☐ Call the Municipal agent

- ☐ Call DSS Elderly Protective Services
 - ☐ Call the Gatekeeper Program
 - ☐ Call 2-1-1
 - ☐ Other - please explain
-

11b. If you checked more than one, please explain the circumstances for each. In other words, how would you decide which number or program to call?

Please think carefully about each of the following statements then check either “Yes” or “No”.

12. If I saw an older adult who was a stranger wandering a store talking to him/herself I would do something.	<input type="checkbox"/> Yes <input type="checkbox"/> No
13. If I saw an older adult who was a stranger wandering a store who appeared to be intoxicated I would do something.	<input type="checkbox"/> Yes <input type="checkbox"/> No
14. If I saw an older adult who was a stranger sitting on the sidewalk I would check to see if he/she was okay.	<input type="checkbox"/> Yes <input type="checkbox"/> No
15. If I saw an older adult who was a stranger sitting on the sidewalk who had been sick I would check to see if he/she was okay.	<input type="checkbox"/> Yes <input type="checkbox"/> No
16. If I saw an older adult who was a stranger lying on the sidewalk not moving I would check to see if he/she was okay.	<input type="checkbox"/> Yes <input type="checkbox"/> No
17. If I saw an older adult who was a stranger lying on the sidewalk not moving and I could see blood I would call an emergency number such as 9-1-1.	<input type="checkbox"/> Yes <input type="checkbox"/> No

In the following, we ask you to think about a variety of statements. In each case, you are asked to think about the extent to which you disagree or agree with the statement. For each statement, circle the one number that corresponds most closely to your feeling from 1- Strongly Disagree to 7 -Strongly Agree .

18. I wouldn't hesitate to make a call about an older adult who seemed to be experiencing difficulty.

Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree

19. Most of my friends/neighbors would approve of making a call about an older adult experiencing difficulty.

Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree

20. It's up to me whether or not I do something, like making a call, about an older adult I believe is in trouble.

Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree

21. It is no use worrying about current events or public affairs; I can't do anything about them anyway.

Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree

22. Most of my friends/neighbors believe that we have a responsibility to take action, like making a call, if we see an older adult in trouble.

Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree

23. My best friend would make a call if he/she saw an older adult experiencing difficulty.

Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree

24. Our country would be better off if we had fewer elections.

Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree

25. Making a confidential call about an older adult who was experiencing difficulty would be an invasion of privacy.

Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree

26. Most of the people I respect would make a call about an older adult experiencing difficulty.

Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree

27. Letting your friends down occasionally is not so bad because you can't do good all the time for everybody.

Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree

28. I would feel obligated to make a call about an older adult if he/she appeared to be experiencing difficulty.

Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree

29. If I saw an older adult in difficulty, it would be hard for me to get involved, even by making a confidential call.

Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree

30. It is the duty of each person to do his/her job the very best he/she can.

Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree

31. I could really help an older adult who was experiencing difficulty just by making a confidential call.

Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree

32. Helping people we don't know personally is a sign of emotional maturity.

Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree

33. People would be better off if they could live far away from other people and never have to do anything for them.

Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree

34. If I saw an older adult who appeared to be experiencing difficulty there is nothing stopping me from making a call for help.

Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree

35. If I were over 60, experiencing difficulty, and didn't know where to turn I would appreciate someone making a call about me.

Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree

36. At school or work I usually volunteered for special projects.

Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree

37. If I saw an older adult in trouble there would always be something that I could do, such as make a call.

Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree

38. If I saw an older adult having difficulty, making a call would be an act of kindness /compassion.

Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree

39. Every person should give some of her/his time for the good of her/his town or country.

Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree

40. Making a call about people who are in difficulty is part of good citizenship.

Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree

41. Most of my friends/neighbors feel that the right to privacy is more important than getting an older adult help, such as by making a call, if they appear to be experiencing difficulty.

Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree

42. I feel very bad when I have failed to finish a job I promised I would do.

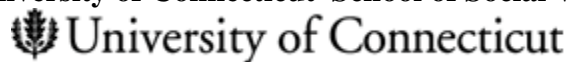
Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree

43. The person I respect the most believes that social service programs play an important role in the community.

Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree

Thank you ! Your participation in this survey may help improve services to older adults.

University of Connecticut School of Social Work



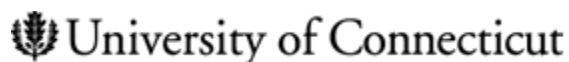
**Gatekeeper Training Survey
Post-test**

-
1. I wouldn't hesitate making a confidential call about an older adult who seemed to be experiencing difficulty.
Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree
 2. It's up to me whether or not I do something, like making a call, about an older adult I believe is in trouble.
Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree
 3. If I saw an older adult in difficulty, it would be hard for me to get involved, even by making a confidential call .
Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree
 4. I could really help an older adult who was experiencing difficulty just by making a confidential call.
Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree
 5. If I saw an older adult who appeared to be experiencing difficulty there is nothing stopping me from making a call.
Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree
 6. If I saw an older adult in trouble there would always be something that I could do, such as make a confidential call.
Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree
 7. If I see an older adult experiencing difficulty I will make a call on his/her behalf.
Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree

Thank you ! Your participation in this survey may help improve services to older adults.

Appendix G: Referral Survey

University of Connecticut School of Social Work



Gatekeeper Referral Survey

1. What is your gender? ☐ Male ☐ Female
2. How old are you? (years) 3. Your ZIP code _____
4. Highest level of education completed (check one):
☐ Elementary ☐ High school ☐ 2-year college ☐ 4-year college ☐ Graduate
5. What race do you consider yourself to be? (check all that apply)
☐ White ☐ Asian ☐ African-American/Black
☐ Native American ☐ Multi-Racial ☐ Other ☐ Not Known
6. Are you Spanish/Hispanic/Latino? ☐ Yes ☐ No
7. How many civic or charitable organizations do you belong to?
8. How many referrals have you made to the Gatekeeper Program? ____
9. How would you *best* describe your relationship to the person/s referred to the Gatekeeper Program (choose only one):
☐ Community member ☐ Family
☐ Neighbor ☐ Self
☐ Friend ☐ Other (describe) _____
10. How long have you known about the Gatekeeper Program? (check one)
☐ Less than six months ☐ Less than a year ☐ More than a year

For the rest of the survey, “older adults” refers to people 60 and older.

Please think carefully about each of the following statements then check either “Yes” or “No”.

- | | |
|---|---|
| 11. If I saw an older adult who was a stranger wandering a store talking to him/herself I would do something. | <input type="checkbox"/> Yes
<input type="checkbox"/> No |
| 12. If I saw an older adult who was a stranger wandering a store who | <input type="checkbox"/> Yes |

appeared to be intoxicated I would do something.	<input type="checkbox"/> No
13. If I saw an older adult who was a stranger sitting on the sidewalk I would check to see if he/she was okay.	<input type="checkbox"/> Yes <input type="checkbox"/> No
14. If I saw an older adult who was a stranger sitting on the sidewalk who had been sick I would check to see if he/she was okay.	<input type="checkbox"/> Yes <input type="checkbox"/> No
15. If I saw an older adult who was a stranger lying on the sidewalk not moving I would check to see if he/she was okay.	<input type="checkbox"/> Yes <input type="checkbox"/> No
16. If I saw an older adult who was a stranger lying on the sidewalk not moving and I could see blood I would call an emergency number such as 9-1-1.	<input type="checkbox"/> Yes <input type="checkbox"/> No

In the following, we ask you to think about a variety of statements all related to making a call for an older person in need of assistance. In each case, you are asked to think about the extent to which you disagree or agree with the statement. For each statement, circle the one number that corresponds most closely to your feeling from 1- Strongly Disagree to 7 -Strongly Agree .

17. I wouldn't hesitate to make a call about an older adult who seemed to be experiencing difficulty.
Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree
18. Most of my friends/neighbors would approve of making a call about an older adult experiencing difficulty.
Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree
19. It's up to me whether or not I do something, like making a call, about an older adult I believe is in trouble.
Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree
20. It is no use worrying about current events or public affairs; I can't do anything about them anyway.
Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree
21. Most of my friends/neighbors believe that we have a responsibility to take action, like making a call, if we see an older adult in trouble.
Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree
22. . My best friend would make a call if he/she saw an older adult experiencing difficulty.
Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree
23. Our country would be better off if we had fewer elections.
Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree

24. Making a confidential call about an older adult who was experiencing difficulty would be an invasion of privacy.
Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree
25. Most of the people I respect would make a call about an older adult experiencing difficulty.
Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree
26. Letting your friends down occasionally is not so bad because you can't do good all the time for everybody.
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28. If I saw an older adult in difficulty, it would be hard for me to get involved, even by making a confidential call .
Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree
29. It is the duty of each person to do his/her job the very best he/she can.
Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree
30. I could really help an older adult who was experiencing difficulty just by making a confidential call.
Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree
31. Helping people we don't know personally is a sign of social responsibility.
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42. The person I respect the most believes that social service programs play an important role in the community.

Strongly Disagree: 1 2 3 4 5 6 7 : Strongly Agree