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Culture from chaos: The formation of social norms from the dynamic self-organization of individuals' attitudes and behavior

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CULTURE FROM CHAOS: THE FORMATION OF SOCIAL NORMS FROM THE
DYNAMIC SELF-ORGANIZATION OF INDIVIDUALS' ATTITUDES AND
BEHAVIOR

An Abstract of a Thesis
Submitted
in Partial Fulfillment
of the Requirements for the Degree
Master of Arts

Jerry G. Cullum
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ABSTRACT

Top-down models of culture provide a useful although limited understanding of cultural content, formation, and change. Previous theorizing using bottom-up models help to explain why cultures exist and explain some of their content. Dynamic social impact theory (DSIT; Latané, 1996) expands on previous bottom-up models by proposing a concise mechanism for cultural content transmission and the dynamic outcome of this process. Furthermore, the catastrophe theory of attitudes (Latané & Nowak, 1994) suggests that the level of involvement of an issue will modify attitude change and therefore modify DSIT's predictions.

The present study expanded on previous research to offer a more complete field test of DSIT (Latané, 1996) and explore how involvement and communication may affect cultural content and change. A total of 1252 students from four residence halls participated in four online surveys over the course of the Fall 2002 semester. Participants indicated that more of their friends and conversers lived in their house than in any other social unit. In the 11 weeks between the first survey and the final survey, students became more similar to those they lived with and the correlation between their attitudes and behaviors increased. However, the consolidation prediction of DSIT

was not supported. Participants did not become more similar on high importance issues than on low importance issues. Unexpectedly, variance and minority size increased more over time for low importance items than for high importance items.

Limitations of the study included low discussion rates of the items and a large portion of the participants having a prior history together, suggesting they may have been similar in their attitudes and behaviors prior to living in the residence halls. Future research avenues and implications for DSIT (Latané, 1996) and CTA (Latané & Nowak, 1994) are discussed.

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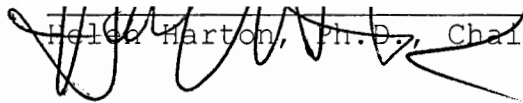
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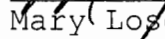


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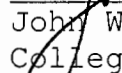
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CHAPTER 1

INTRODUCTION

Most studies of culture are inter-cultural or cross-cultural in nature. That is, they begin with cultures as existing entities and compare them, or they discuss the psychosocial effects cultures impose upon their constituents (Bennett, 1998). Such approaches follow a top-down model of culture. As a result traditional methods for investigating culture implicitly assume that (a) cultures are pre-existing monoliths and (b) enculturation is therefore a process of culture acting on the individual. These assumptions guide the body of research on culture in the social sciences and beg the question of what culture is (Harton & Bourgeois, in press). Such a top-down understanding of culture limits our level of investigation, and it struggles to account for cultural change over time and the origins of culture as a group phenomena.

Top-down Approaches to Culture

Cross-Cultural Psychology

Often when psychologists study culture, it is with regard to the effects it has on individuals. Cultural psychologists investigate these effects by comparing individuals from two or more different cultures. This

approach begins with the assumption that cultures are different and proceeds to test ways in which these divergent cultures psychologically affect those who are in them. This line of research has been fruitful in illuminating cultural differences in cognition and perception (Nisbett & Norenzayan, 2002; Nisbett, Peng, Choi, & Norenzayan, 2001), personality and the self (Cross & Markus, 1999; Kanagawa, Cross, & Markus, 2001), and morality and affect (Haidt, Koller, & Dias, 1993; Haidt, Rozin, McCauley, & Imada, 1997). However, cross-cultural comparisons tell us little about how these cultural differences came about or how and if they change over time. Instead, cross-cultural psychologists generally treat cultures as pre-existing units imposing differential effects on those who fall under each's respective umbrella.

Anthropology

Anthropologists, the primary students of culture, often follow a top-down model of culture, as evident in their conceptions of culture and their methodology. The different sub-fields of anthropology have different conceptions of culture (Bennett, 1998; Hudson, 1972; Hugill & Dickson, 1988). For example, many biological anthropologists conceive of culture as an event in our

hominid past, whereas many archeologists conceive of culture with regard to geographical trends in material artifacts (Pope, 2000). Despite their differences, these diverse conceptions of culture share an understanding of culture as its own object of analysis. This notion comes to a forte in cultural anthropology. Bennett (1998) noted, in his review of the anthropology literature, that cultural anthropologists often confuse "culture" as an abstraction of the behaviors and attitudes of a group of people with "Culture" as an agent causing the behaviors and attitudes of a group of people. The latter conception of culture was explicitly stated in Kroeber's (1917) highly influential paper *The Superorganic*. In it, Kroeber espoused that culture was something distinct from the biological and irreducible to the actions of men and women; instead, he asserted culture as a distinct metaphysical entity, and in doing so, established it as the object of analysis for generations of cultural anthropologists to come.

To study culture as an irreducible super structure, cultural anthropologists utilize two methodologies: ethnography and ethnology. Ethnography, like a cultural topography, strives to poignantly describe the behaviors and beliefs of a particular culture (Ember & Ember, 1990).

Cultural anthropologists often interview informants and participate in the activities of a group of people under the domain of the desired culture in the hope that they may glean from these data qualities of the culture. Ethnology simply involves a comparison of the similarities and differences between multiple cultures. The data that result from these types of methodologies provide us with a rich understanding of cultures and their diversity, but they offer us little insight into the formation of these cultures as group phenomena or how they change over time.

Questions Unanswered by Top-Down Models

Limited as it is, even descriptive and comparative data reveal that cultures changes over time. To illustrate, imagine people of different cultures coming to occupy the same living space. A strict top-down approach would suggest that either each person would simply live out his or her distinct and prior existing cultural norms indefinitely and independent of those around him or her, or that the dominant culture would assimilate the weaker one. Historians and anthropologists would argue against such a hasty conclusion, citing literature on syncretism (Gellner, 1997; Hugill & Dickson 1988). Syncretism is the blending or combination of elements from multiple cultures into one

coherent system (Hunter & Whitten, 1976) and has been shown to occur with a variety of cultural components, such as language (Bickerton, 1983; Senghas, 1995) and religion (Gellner, 1997; Murphy, 1993). Psychologists would also likely argue against such a hasty conclusion, citing literature on minority persistence or reactance (Brehm, 1966; Moscovici, Mucchi-Faina, & Maass, 1994). Other social scientists would likely come to a similar conclusion, each citing literature relevant to their respective field.

A top-down understanding of culture does not afford the various social sciences a concise explanation of *why* cultures change over time. In a similar vein, it offers no predictions on *how* cultures change or from *where* they originate as group phenomena.

In this manuscript I will discuss various definitions of culture and formulate a working definition that captures their shared essence. I will then note how a top-down perspective runs into a tautological quandary in light of these definitions. Next, I will briefly discuss the evidence in support of a bottom-up model of culture. I will then turn to several bottom-up theoretical perspectives that attempt to account for cultural content and formation and discuss the limitations of each perspective. Next, I

will introduce dynamic social impact theory (DSIT; Harton & Latané, 1997b; Latané, 1996) as an alternative perspective that answers the criticisms of the other approaches and provides a more complete explanation of cultural evolution. Then I will narrow the focus of cultural content to attitudes and behaviors and discuss how perceived importance of an issue might modify DSIT's predictions. Finally, I will describe the 2002 UNI Dorm Study, a portion of which serves as a field test of DSIT using behavioral items and low and high importance attitude items in four college residence halls.

CHAPTER 2

LITERATURE REVIEW

What is Culture?

There are many definitions of culture even within the same discipline. For example, Edward Tyler (1871), one of the first cultural anthropologists, espoused a definition of culture still acknowledged today: "culture is that complex whole, that includes knowledge, belief, arts, morals, laws, customs, and any other capabilities and habits acquired by man as a member of society" (p. 6). Margaret Mead (1959), another widely recognized cultural anthropologist, defined culture as "the systematic body of learned behavior which is transmitted from parents to children" (p. vii).

Social psychology also offers an assortment of definitions of culture. For example, within two introductory social psychology books the authors define culture differently; Myers (1999) defines culture as "the enduring behaviors, ideas, attitudes, and traditions shared by a large group of people and transmitted from one generation to the next" (p. 11), whereas Kenrick, Neuberg, and Cialdini (2002) define it as "the beliefs, customs,

habits, and languages shared by the people living in a particular time and place" (p. 5).

However, these four definitions and many others would likely agree with a working definition of culture as a collection of various attributes shared by a collection of people. When we look at this unifying theme among diverse definitions of culture, a top-down model of culture runs into a tautological quandary: culture is supposed to define the beliefs of the very individuals whose sum of shared beliefs define it. How can a collection of shared attributes dictate to its constituents what they believe when it is defined by what they believe? Ultimately, a top-down model cannot account for the origins and change of culture as a group phenomena.

The working definition of culture as a collection of various attributes shared by a collection of people offers some insight into how we may reconceptualize culture. It may be beneficial to conceive of culture not as the superorganic, but as the accumulation of smaller, more idiosyncratic components (e.g., social norms) comprised of still smaller components (e.g., individual attitudes). Such a notion of culture assumes that it is fluid and the self-

organizing result of a dynamic bottom-up process (Latané, 1996).

Evidence for a Bottom-up Model of Culture

In one classic study of social influence, Festinger, Schachter, and Back (1950) argued that the majority of cultural influence is maintained, transmitted, and enforced via informal face-to-face groups. They found support for this assertion in a study of married couples randomly assigned to apartments in a housing community at the Massachusetts Institute of Technology. In this community, functional geography largely determined with whom one befriended and interacted on a daily basis. In turn, with whom one interacted largely determined one's attitudes towards the newly developing tenants' organization. In this case, a normative attitudinal response seemed to develop from individuals who shared a common space influencing one another.

Attitudes, however, are not the only cultural element to organize into social norms. Health behaviors may also proliferate and spread from individuals influencing one another. Crandall (1988) found distinct binge eating norms in a study of two sororities. A different norm developed in each sorority, and the binge eating behavior of any one

member was best predicted by that of her closest friends. As illustrated by these examples, normative cultural elements can emerge from a complex process of local social influence.

Explaining Cultural Content and Formation

There are several theories that attempt to explain the dynamics of culture following a bottom-up model. These include Darwinian anthropology, evolutionary psychology, meme theory, and diffusion theory. Each of these perspectives attempts to answer the questions that top-down approaches struggle with, namely the acquisition of cultural content, cultural formation, and cultural change.

Darwinian Anthropology

Darwinian anthropologists view culture as a product of the evolutionary process of inclusive fitness maximization (Janicki & Krebs, 1998). That is, groups and individuals strive to maximize the amount of genetic material they contribute to future generations of their species, and culture is one means through which they can do this. Irons (1979) noted that culture seemed well suited to allow individuals and groups to track their environment and adjust their behaviors as the conditions changed. In this perspective, all culture originates from biological

fitness; it exists because it is advantageous to its adherents. Culture is purported to serve an adaptive function for those under its ascendancy. Cultural diversity is thought to be the result of different selection pressures stemming from different environments. Cultures change over time to the extent that the selection pressures of the environment change. In sum, Darwinian anthropology views culture as the outcome of actions of individuals motivated to maximize their inclusive fitness under divergent ecological and social conditions.

Although this perspective offers an explanation for why cultures originate, change, and take on the qualities that they do, it is not very insightful as to the mechanism through which these adaptive components of culture proliferate. Furthermore, this perspective only accounts for the adaptive components of culture and often explains them post hoc. However, some behaviors of cultures are maladaptive (Gladwell, 2000), and many more are completely arbitrary (Weiss, 1994). For example, regions of the U.S. vary in the term they prefer to use in reference to soft drinks (Campbell, 2003). People who live in the Midwest predominantly refer to it as "pop," Southerners predominantly refer to it as "coke," and those who live on

the East and West coast predominantly refer to it as "soda." It would seem absurd to argue that regional trends in the term used in reference to soft-drinks differentially maximize inclusive fitness in each region. In conclusion, Darwinian anthropology can not explain why so much of culture is arbitrary or even maladaptive; nor can it explain the mechanisms through which cultures form and change.

Evolutionary Psychology

For evolutionary psychology, however, arbitrary and/or maladaptive qualities in culture are not as strong of a criticism because evolutionary psychology views the human mind as consisting of content and domain specific modules that are adapted for our hunter-gather past and not for the cultural milieus of the present (Janicki & Krebs, 1998). Tooby and Cosmides (1992) in their book *The adapted mind: Evolutionary psychology and the generation of culture*, espouse that culture originates as an interaction between evolved modular brains with each other and with their current environment and all its contingencies. To help clarify this relationship, they depict culture as consisting of 3 facets: (a) metaculture, (b) evoked culture, and (c) epidemiological culture. Metaculture is

the universals between all people that allow them both to communicate cross-culturally while lacking a shared language system and to transmit culture. Evoked culture is the differential responding of these universals to environment specific contingencies. Finally, epidemiological culture is the capacity for social learning afforded us via our evolved modular brain.

With respect to evoked culture, evolutionary psychology varies little from Darwinian anthropology, in that both theories assert that divergent cultures stem from differential selection pressures imposed by the environment. What evolutionary psychology adds with its conception of metaculture and epidemiological culture is an explicit recognition of the universal human capacity for culture. If the tenets of evolutionary psychology hold true, then we would expect to find systematic ways in which humans learn and transmit culture. However, evolutionary psychologists have largely overlooked this line of research, focusing instead on the investigation of species-specific, content-specialized modules in the brain that are sensitive to specific stimuli and result in fixed reflex-like responses (de Waal, 2002; Harris, 2003). As a result,

evolutionary psychology has difficulty explaining cultural origins and change.

Meme Theory

Proponents of meme theory argue that culture is the compilation of small, self-replicating units (Blackmore, 1999; Dawkins, 1976). These units, referred to as memes, include all information that can be imitated and conveyed from one person to the next. This perspective borrows from evolution theory the notion of genes as replicators that undergo selection pressures and applies it to the cultural domain. Just as some genes are more successful in replicating themselves in a given environment, so too are some memes more prolific in a given environment. Examples of memes include fashion, music, and fads. In this approach, whether a meme or aspect of culture is advantageous or not to those who adhere to it is irrelevant; all that is necessary is that the meme have some quality to it (i.e., communicability) that increases the likelihood of it replicating from person to person (Dawkins, 1976; Schaller, 2001). Cultural change over time then is simply the change in meme expressions. Although this approach offers insights into the qualities that make cultural elements attractive and explains why some cultural

elements might spread more easily than others, it remains vague in its depiction of how memes spread.

As noted earlier, memes are thought to spread from person to person via imitation (Dawkins, 1976). However, it remains unclear just what imitation is. Blackmore (1999), a meme theorist, spends some time in her book, *The meme machine*, explaining what does and does not constitute imitation. She notes that "imitation is learning something about the form of behavior through observing others, while social learning is learning about the environment through observing others" (p. 49). For example, a bird learning a particular song by listening to another bird sing would constitute imitation, whereas a bird learning where to peck by watching another bird receive a reward for pecking a certain object would constitute social learning. Although meme theorists are beginning to better define imitation, they have yet to specify the conditions necessary for imitation to occur.

Diffusion Theory

Of all the theories discussed thus far, diffusion theory is the only one that explicitly addresses the question of how cultures change. Proponents of this theory posit that cultural elements diffuse outward from a

culture-area through contact with other cultures (Ember & Ember, 1990). Wissler (1927), the father of American diffusionism and an early proponent of the Regionalist movement, defined a culture-area as "a formulation expressing regional characteristics of human social behavior" (p. 885). These culture-areas contain culture-trait complexes, where many cultural traits are present in the same location. Starting from a culture area, a culture-trait complex would diffuse in a wave-like fashion into neighboring culture areas. This approach has been used to explain the spread of innovations such as Chinese technology to medieval Europe (McNeill, 1982; White, 1962) or the spread of the automobile in the early to mid 1900s (Hugill, 1988). As evident in these examples, diffusion researchers typically investigate the spread of technology and innovation, assuming advances pervade from culture areas high in technology to regions low in technology. However, some researchers have also applied diffusion theory to explain the spread of various forms of artistic material culture and ideas (Hugill & Dickson, 1988; Wissler, 1927).

Although diffusion theory begins to offer some insights into how culture may change, it is limited in its

analysis and methodology. First, diffusion research is largely limited to material culture or objects. Attitudes, behaviors, and belief systems, which are more difficult to track, have largely been neglected in the research.

Secondly, diffusionist explanations are often offered post-hoc to explain the spread of something, but few have used this theory *a priori* to predict under what circumstances a culture-trait complex will diffuse. In fact, diffusionists often treat the route of diffusion as static and one-directional. That is, it flows from one culture area to a neighboring one. But it is just as likely that the neighboring culture area is also diffusing something in the opposite direction. Finally, diffusion theory begins with preexisting cultures and does not explain how the culture-traits came to cohabitate in the same region.

Summary

In sum, these perspectives all take steps to explain cultural content, its origins, or its change. Darwinian anthropology suggests why cultures exist and why they change, namely as versatile adaptive tools that allow individuals and groups to better track their environment. However, it does not explain the mechanism of cultural origins (i.e., with regard to group phenomena) and change,

and it does not account for the large amount of arbitrary and maladaptive content within cultures. Evolutionary psychology explicitly recognizes a universal human capacity for culture, suggesting systematic ways in which our species may acquire cultural content. However, evolutionary psychology's emphasis on a modular brain eliciting species-specific and fixed responses ignores the diversity of cultural content humans acquire. Meme theory can account for cultural content, change, and origins in that it sees culture as consisting of gene-like self-replicators that vary in their ability to spread and in their degree of expression. Meme theory even suggests how memes replicate, namely via imitation. However, what constitutes imitation is murky, and the conditions necessary for imitation to occur remain vague. Finally, diffusion theory concerns itself with how cultural traits spread over time, namely outward from regions of high concentration to regions of low concentration. However, this perspective remains largely topographical and fails to predict cultural change *a priori*. In addition, this perspective begins with existing culture-trait complexes without accounting for their origins.

All of these theoretical perspectives account for varying degrees of cultural content and origins in their own unique way; however, they all lack a conceptualization of the dynamic process of how cultures originate and acquire their content. Without addressing such issues, these bottom-up approaches are also unable to address the systematic ways in which cultures change over time.

Several of these theories refer to social learning (Bandura, 1977) and/or operant learning (Skinner, 1953) processes as satisfactory for explaining how cultures acquire their content, how they form, and how they change over time. For example, Darwinian Anthropology assumes that environmental conditions lead certain behaviors to be reinforced and others to be punished or extinguished. Over time, we would be left with the fittest behaviors for that particular environment and these would then make up the core of a particular culture. However, this approach does not account for other dimensions of culture including attitudes, beliefs, and ideologies. Furthermore, this caveat still does not answer where the arbitrary and even maladaptive components of culture come from and why they may proliferate. We are also left with a rather long time line for cultural evolution and change, and one that is not

likely representative with the rapid evolution and change of cultural content experienced even between a single generation.

Darwinian Anthropology, and other perspectives, may also agree with the tenets of social learning theory (Bandura, 1977) which posit that direct experience with the environment need not be necessary for learning about environmental contingencies. Instead, social learning theory posits that we may learn about the environment through observing others. This explanation serves to condense the time for adaptive behaviors to proliferate. In addition, social learning theory posits the status of the observed model determines the likelihood of the behavior being copied. This additional influence beyond pure environmental contingencies opens the door for maladaptive and arbitrary behaviors to flourish so long as they are coming from a high status model. Thus, social learning theory (Bandura, 1977) may help to explain how one particular dimension of culture (i.e., behavior) may spread. However, social learning may be a part of broader mechanisms shaping culture. For all of its benefits, social learning theory does not address other cultural components such as social norms and attitudes and explain how they may

proliferate. Neither does it address the disproportional exposure of observers to models nearest them, nor how multiple models may affect learning. Finally, it does not take into account the reciprocal nature of the observer/model relationship. That is, often the model is also observing and potentially learning from others. Dynamic social impact theory (Latané, 1996) can help us to understand this process and offers new insights into how cultures originate and change.

Dynamic Social Impact Theory (DSIT)

Dynamic social impact theory (Harton & Latané, 1997b; Latané, 1996; Nowak, Szamrej, & Latané, 1990) is a meta-theory that asserts that the origins of culture rest in the daily communication of individuals who share a common space. DSIT explains and accounts for both the origins of culture (i.e., as a group phenomena) and cultural change over time (Harton & Bourgeois, in press) through a process of social influence. To this end, DSIT proposes both a mechanism for and outcome of social influence.

The Mechanism

The mechanisms through which social influence occur stem from Latané's (1981) earlier social impact theory (SIT). SIT asserts that social influence on any one person

from another or multiple others is a result of three factors: (a) the persuasiveness or *strength* of those people, (b) the proximity or *immediacy* of those people to one another, and (c) the *number* of people who share a particular view. The amount of influence or impact these "others" have on the target person is a multiplicative function of these three factors (strength, immediacy, and number). This simply means that impact will increase as these factors increase, provided that none of the factors equals zero. For example, there may be a large number of people from China (high number) who are very persuasive (high strength) on a particular issue; however, their immediacy to a target person thousands of miles away in Iowa is virtually non-existent. Therefore, their impact on our target Iowan is likely to be nearly zero. On the other hand, a sociable neighbor (high immediacy; low number) who is very persuasive (high strength) on a particular issue will likely have more of an impact on their Iowan neighbor.

Moreover, Latané (1981) asserts that the number factor of impact should operate as a power function. That is, each additional individual offers diminishing levels of impact beyond the previous individual. In other words, if the impact on a target person is X when he/she is influenced by

one person, and we add another person while holding immediacy and strength constant, the impact on the target will be more than X but less than $2X$. Finally, the level of impact is diffused among the number of targets. This means that the amount of impact a group has on a target is less for multiple targets than it would be if there were only one target.

The mechanism of influence proposed by SIT has received a breadth of support from research both inside the lab (e.g., Clark, 1999; Hart, Stasson, & Karau, 1999), and in the field (e.g., Harkins & Latané, 1998; Sedikides & Jackson, 1990). SIT has also been used to more parsimoniously explain classical research on social influence. For example the strength and immediacy factors of SIT help to explain and account for findings in the classic obedience studies (Milgram, 1963). Moreover, the number factor of SIT helps to explain and account for the findings in Asch's classic conformity studies (Asch, 1956; see Latané, 1981). As a result, researchers have utilized SIT to better understand diverse social phenomena including voting behavior (Harkins & Latané, 1998), eyewitness and expert testimony (Wolf & Bugaj, 1990), perceptions of crowding (Knowles, 1983), help seeking (Williams &

Williams, 1983), and the efficacy of door-to-door solicitation (Jackson & Latané, 1981).

Despite its support and applicability, SIT remains a static theory that assumes, for simplicity's sake, that the direction of impact is a one-way street from an influencer to a target. However, social influence in the real world is multi-directional with multiple targets that reciprocally and simultaneously exert influence upon each other (Latané, 1981; Nowak et al., 1990). Taking this into account is a messy enterprise, but advances in technology allow computer simulations to play out such dynamic scenarios. On the basis of thousands of these simulations, Latané and colleagues (e.g., Harton & Latané 1997b; Latané, 1996; Latané & Bourgeois, 2001; Nowak et al.) proposed DSIT in order to better account for simultaneous and reciprocal influence. These computer simulations show a consistent pattern of results across multiple programming languages, influence equations, distributions of opinions, and initial assumptions (Latané, Nowak, & Liu, 1994).

The Outcome

These consistent findings can be described by four phenomena that form the predictions of DSIT: (a) *Clustering*, or spatial regions of people who hold a similar

view on a given issue; (b) *Correlation* of unrelated issues as a group of individuals who agree on one issue will likely agree on another; (c) *Consolidation*, or an increase in the majority view and a decrease in minority views on a given issue; and (d) *Continuing diversity*, as not all the individuals will come to agree with the majority.

These four outcomes received support from archival and demographic research (e.g., Metcalf, 2000), in field settings, (e.g., Bourgeois & Bowen, 2001), and in more controlled settings (e.g., Latané & L'Herrou, 1996). Archival and demographic data involve historical data over long periods of time (e.g., Crystal, 2000; Metcalf, 2000) and/or large samples from diverse populations (e.g., Vaux, Golder, Starr, & Bolen, 2003). Field setting data include research from urban housing projects (e.g., Newman, 1976) and college residence halls (e.g., Bowen & Bourgeois, 2001). Data from controlled settings include computer mediated discussion studies (e.g., Latané & Bourgeois, 1996) and face-to-face discussion groups (e.g., Harton, Green, Jackson, & Latané, 1998).

Clustering. Clustering results in large part from the immediacy factor of social impact. That is, people tend to communicate more with and therefore exert greater influence

on those who share a common space with them than those who do not (Latané, Liu, Nowak, Bonevento, & Zheng, 1995). As a result, those who share that common space are likely to come to agree on a certain issue. To illustrate, in the United States, political orientation seems to cluster by region (Weakliem & Biggert, 1999). Districts, states, and whole regions of the U.S. show consistent voting trends over several decades (Glenn, 1967; Glenn & Simmons, 1967), throughout the 20th Century (Peltzman, 1985), and to a lesser extent dating back to the Colonial Era (Fischer, 1989). For example, people in Texas consistently vote for Republican candidates, whereas in California they consistently vote for Democratic candidates. Beyond political issues, regional clustering occurs in dialect and language use (Harton & Bourgeois, in press; Metcalf, 2000; Vaux et al., 2003) in product consumptions and lifestyles (Weiss 1994; 2000), in preferred soft drink terminology (Campbell, 2003), and in music preferences (Mark, 1998).

In a more localized field setting, Festinger et al. (1950) found that attitudes towards a tenants' organization were largely guided by the spatial ecology of respondents' housing projects. Furthermore, Newman (1976) found crime

rates and tenant involvement to cluster in two low-income housing projects across the street from one another, despite having demographically identical clientele. In a residence hall setting, attitudes toward both alcohol (Bourgeois & Bowen, 2001) and homosexuals (Bowen & Bourgeois, 2001) clustered by floor.

In more controlled settings, Latané and colleagues (Huguet, Latané, & Bourgeois, 1998; Latané & Bourgeois, 1996; Latané & L'Herrou, 1996) found clustering to occur on a variety of types of issues in three types of social geometries using electronic discussion groups. Furthermore, clustering occurred in these studies despite incentives to come to a consensus. Finally, in face-to-face discussion groups, Harton et al. (1998) found that when students discussed classroom material with a limited number of their neighbors, they tended to give the same responses to multiple choice questions as those seated next to them.

Correlation. Correlations between previously unrelated attributes tend to increase over time and after discussion (Latané, 1996). In the case of attitude structures, logically, pro-life and anti-death penalty stances stem from the same humanistic argument for the preservation of life; however, conservatives tend to be pro-life and pro-

death penalty, whereas liberals tend to be pro-choice and anti-death penalty. Moreover, people who are politically conservative tend to be liberal on gun rights, whereas people who are politically liberal tend to be conservative on gun rights. Although one may explain away these logically conflicting attitudinal responses as part of larger ideologies, there is still the question of how such views came to be associated with each other in the context of their respective ideologies.

Earlier I discussed archival and demographic data on regional differences in various cultural attributes. If we were to look at clustering by region on these attributes simultaneously, we would find a high degree of overlap between regions that purchase via mail, buy muscle cars (Harton & Bourgeois, in press; Harton & Latané, 1997b; Weiss, 1994), refer to soft drinks as "coke" (Campbell, 2003), vote Republican (Weakliem & Biggert, 1999), and prefer to listen to country music (Mark, 1998). There is no innate relationship among all these attributes, yet they have a high preponderance to co-occur in people who live in the Southeastern United States (Reed, 1974). DSIT suggests that these examples of logically conflicting stances and unrelated attributes result from the immediacy and strength

factors of social impact. That is, the same people who we persuade and in turn are persuaded by on one issue are the same people we persuade and are persuaded by on other issues.

To date, no published field test has investigated DSIT's (Latané, 1996) correlation prediction. However, correlation has been found to occur in more controlled tests of DSIT. For example, Latané and Bourgeois (1996) found originally unrelated issues to correlate more after electronic discussion regardless of the type of social geometry used. And, in a classroom setting, Harton et al. (1998) found that students' responses across several multiple choice questions correlated more strongly after discussing them with their neighbors than before discussion. Furthermore, this increase in correlation of responses to unrelated questions occurred independent of the responses' accuracy.

In a similar vein, Schaller (2001) argues that much of what we conceive of as culture is the co-occurrence of shared beliefs and behaviors. Indeed, the exotic and idiosyncratic "cultures" described in anthropologists' ethnographies are likely the result of co-occurring attitudes and behaviors (Bennett, 1998). Evidence in

support of Schaller and Bennett's assertions (as well as DSIT's) rests in research on the formation of social representations and stereotypes. Social representations, the schemas shared by a collection of people, are also likely to result from co-occurring cultural attributes (Huguet & Latané, 1996). Huguet et al., (1998) found different conceptions of human rights to correlate more strongly after two and a half weeks of email discussion, and this led to a more coherent social representation of human rights within each discussion group.

With regard to stereotypes (i.e., another form of social representations), Schaller, Conway, and Tanchuk (2002) found stereotypes of ethnic groups to consist of co-occurring, highly communicable traits. Harton, Schwab, and Peterson (2002) also found the content of different ethnic group stereotypes to vary by different co-occurring attributes. Moreover, the expression of prejudice towards unrelated groups occurs. For example, Crandall, Eshleman, and O'Brien (2002) found that Americans feel that it is acceptable to be prejudiced against Nazis and fat people.

Consolidation. Consolidation results in large part from the number factor of social impact. That is, minorities are likely to reduce over time because they are

often more exposed to others who hold the majority view than the minority one. Harton and Bourgeois (in press) offer two examples from archival data that illustrate consolidation in religion and language, respectively. First, the Southern Baptists, the largest U.S. Protestant denomination, grew by 133% from 1952 to 1990, at the expense of other smaller denominations such as the Episcopal Church (Halvorson & Newman, 1994). Languages are also consolidating over time (Harton & Bourgeois, in press). Of the 15,000 languages known to exist during the 16th century, only 6800 remain, with the 15 most popular languages increasing in use, often at the expense and extinction of less pervasive languages (Crystal, 2000; Sampat, 2001). This is predominantly due to both the strength and number factors of social impact. For example, non-native speaking immigrants often abandon their own languages within a few generations in favor of the more powerful language (the language used by higher status individuals in a society or organizations with more resources) and/or the language more commonly spoken by their peers (Harris, 1998; Seliger & Vago, 1991).

To date, no published field test has investigated DSIT's (Latané, 1996) consolidation prediction. However,

several studies of computer-mediated discussion have shown minority size to decrease over time on a variety of issues (e.g., Huguet et al., 1998; Latané & Bourgeois, 1996; Latané & L'Herrou, 1996). Latané and L'Herrou (1996) found consolidation on an issue to occur in two social geometries that left minorities more exposed to the majority, but not to occur in a social geometry that insulated the minority. Latané and Bourgeois (1996) also found consolidation to occur on a variety of issues using three different kinds of social geometries. In the context of the classroom, the majority view of the correct answer increased over time as well (Harton et al., 1998). This occurred as a result of discussion and regardless of the accuracy of the most widely accepted answer.

Continuing Diversity. Continuing diversity results from immediacy and clustering, which operate as limiting factors of influence. That is, a limited number of others can be close at hand to impact us at any given time and while we may come to be in congruence with those clustered around us (a local majority), our view may actually be in the minority of the broader population (Latané, 1996). For example, a liberal political mentality may thrive on college campuses even in areas that are predominately

conservative (Newcomb, Koenig, Flacks, & Warwick, 1967; Sears, 1975) and a conservative political mentality may thrive in military schools even in areas that are predominantly liberal (Guimond, 1995; 1999). Students and faculty on such campuses seem insulated from the views of the area majority. Even within such politically polarized campuses, diversity continues due to the differential immediacy between those who share a common field of study and those who do not (Guimond & Palmer, 1990; 1996).

To date, no published field test has investigated DSIT's (Latané, 1996) continuing diversity prediction. However, Latané and L'Herrou (1996) demonstrated this minority insulation principle in electronic discussion groups in which participants were only allowed feedback from four other participants in three varieties of social geometry. Participants were offered monetary rewards for agreeing with the majority; despite this motivating factor to conform, minority views persisted in all three social geometries. Furthermore, the social geometry that most insulated participants from the majority view failed to consolidate as not all people in local majorities realized they were in the global minority. In addition, Latané and Bourgeois (1996), using a similar design, found diversity

to continue across a variety of issues, especially when participants had limited access to other participants. Continuing diversity was also found in face to face discussion groups. Out of eight discussion groups of 15 to 30 participants, Harton et al. (1998) did not find one group to come to a complete consensus on anyone of three questions with good initial diversity.

Often times, however, minority members are not passive but actively motivated to maintain their views or to resist influence from the majority (Latané & Wolf, 1981; Moscovici et al., 1994). In one study, individuals who deviated from the group majority often reduced their contact with the group, thus diminishing both its influence over them and their status within the group (Festinger et al., 1950). Harton and Bourgeois (in press) note that these same trends occur in religious clusters. For example, the Amish often form reclusive and isolated pockets of resistance against the broader culture of technology, while persuading few others to take up their way of life (Kraybill, 2001). But how might we determine on which issues individuals and groups will resist change? And how might we determine what amount of influence they can resist before succumbing to the tyranny of the majority?

Catastrophe Theory of Attitudes

The catastrophe theory of attitudes (CTA; Harton & Latané, 2002; Latané & Nowak, 1994) is a meta-theory that accounts for minority reactance against the majority and offers some insights not only on how minority views might change, but how anyone's views might change, regardless of status. The theory suggests that attitudes are a function of two continuous variables that are related to each other based on a cusp catastrophe: information and involvement. The effect of information on attitude is modified by the level of involvement of the issue, which serves as a splitting factor. For issues in which the level of involvement is low, attitudes will change linearly or gradually over time in the direction of the information one receives. This relationship between involvement and attitudes begins to change as involvement increases. For issues in which the level of involvement is high, attitudes tend to be extreme and stable, but when they do change, the change will be more dramatic. For example, a novice basketball player's attitude toward a particular brand of shoe would likely change incrementally with the information presented because basketball is not that involving for the novice. On the other hand, a professional player (for whom

basketball is very involving) would likely have a more stable attitude toward the brand of shoe and change more suddenly when the information in favor of a different brand is high.

Several process theories show support for CTA's (Latané & Nowak, 1994) prediction that involvement modifies the effect of information on attitudes. For example, social judgment theory (Sherif & Hovland, 1961) posits that ego-involvement modifies how the individual responds to attitude discrepant and confirming information, such that an involved person will be more resistant to discrepant information and more receptive to confirming information than a non involved person. In support of this, a number of studies (e.g., Brent & Granberg, 1982; Rhine & Severance, 1970) found that non-ego-involved individuals' attitudes change in proportion to the information presented, whereas ego-involved individuals' attitudes do not (for a review see Eagly & Chaiken, 1993). The Elaboration Likelihood Model (ELM; Petty & Cacioppo, 1986) also shows support for the modifying role of involvement on attitude change. Research has found involving attitudes to be more extreme than non-involving attitudes (e.g., Krosnick, 1988) and

more resistant to change (e.g., Petty, Cacioppo, & Goldman, 1981; for a review see Krosnick & Petty, 1995).

In further support of CTA's (Latané & Nowak, 1994) predictions, Harton and Latané (1997a) and Liu and Latané (1998a) showed that more involving attitudes were also more extreme. these effects hold for a number of types of issues, populations, and response alternatives (Harton & Latané, 2002) showed that Increases in involvement caused by thought, information, and discussion also lead to increases in extremity (Harton & Latané, 1997a; Liu & Latané, 1998b). In a longitudinal study of communication and attitude change, involving attitudes changed less often than less involving ones, but when they did change, the amount of change was greater (Harton & Latané, 2002).

Constraints on Dynamic Social Impact

The propositions and findings of CTA hold three implications for DSIT (Harton & Bourgeois, in press): (a) information should increase attitude extremity to the extent that it also increases perceived involvement. In other words, communicating information with neighbors is likely to increase issue involvement and lead to group polarization (Harton & Latané, 1997a; 2002); (b) people are more likely to communicate issues of shared

relevance/importance (Festinger et al., 1950; Harton & Latané 2002; Latané, 1996). That is, people do not tend to discuss things that are not of mutual interest, and this is likely to limit social influence on these issues; and (c) the level of initial issue importance to the target modifies the impact others may have on him or her. In other words, people are less likely to be influenced by their friends and neighbors on issues that were important to them before they came to share a living space, but when change does occur, it will be more drastic (see Harton & Bourgeois, in press).

This suggests that issues of low importance should either not cluster (if they are not discussed) or lead to unanimity as influence will occur linearly and converge on an average value. Issues of moderately high importance may show more clustering and consolidation over time as they are communicated more often and tend to polarize.

Expanding Our Understanding of Culture

Prior research on culture is mostly descriptive and comparative, often using culture as the unit of analysis, and offers little account of cultural change. Furthermore, the existing body of research fails to account for the formation of culture, due in part to the pervasive use of a

top-down model. The present study documents the formation and change of culture. DSIT, a meta-theory of social influence, proposes that culture originates through the dynamic process of individuals who share a common space influencing one another. However, research testing DSIT in the real world is limited in number and scope. The two published studies in a real world setting (Bourgeois & Bowen, 2001; Bowen & Bourgeois, 2001) only surveyed participants on a limited number of items and at a single point in time. These studies also did not explore how involvement and communication may affect social impact.

In this study, I offer the most comprehensive field test of DSIT to date, using the real world setting found in college residence halls. I test a bottom-up model of culture by examining the development of "culture" in four college residence halls using data from the 2002 UNI Dorm Study, a year long study of students' attitudes and behaviors. This study documents the development of social norms (one element of culture) through a process of individuals who share a common space (e.g., house, hall) mutually influencing one another over an 11 week period during the Fall 2002 semester.

Why Look for Culture in College Residence Halls?

Many who have lived in a residence hall intuitively recognize the formation of norms as each floor and each residence hall develops its own feel and flavor. So how do such geographical differences develop with such a homogeneous demographic (i.e., college aged students) randomly assigned to a living space? From a top-down perspective this makes little sense. The culture that they share as American college students should impose the same values, principles, and codes of conduct on all of them. From a bottom-up perspective, however, this sounds more reasonable. The differences between floors and residence halls may develop from the idiosyncratic beliefs, behaviors, and influence each individual brings to their respective group. College residence halls are not a cultural body *per se*, but we may look at them as microcosms to investigate questions applicable to a broader scope: (a) Where does culture come from, (b) how does it change over time, and (c) what role does issue importance and discussion play in the transmission of cultural elements?

Overview

The present study tracks two dimensions of culture in college residence halls: (a) attitudes and (b) behaviors. Students in four University of Northern Iowa residence halls were invited to participate in the 2002 UNI Dorm Study, a year long study of attitudes and behaviors. The present study uses data from four staggered online surveys administered during the Fall 2002 semester. Each of the 4 halls invited to participate consists of eight smaller social units called houses. Within the four surveys pertinent to this study, students responded to a variety of items assessing demographics, attitudes, behaviors, and sociometrics.

Hypotheses

Hypothesis 1: Students who share a common space (e.g., house) will interact more and befriend each other more than students who do not share that common space. This hypothesis tests the immediacy factor of social impact theory (Latané, 1981).

Hypothesis 2a: Students who share a common space will become more similar in their attitudes and behaviors over time. This hypothesis tests for geographical clustering as predicted by dynamic social impact theory (Latané, 1996).

Hypothesis 2b: More involving issues will cluster to a greater extent than low involving issues. This hypothesis tests for constraints on dynamic social impact theory (Harton & Bourgeois, in press) as predicted by the catastrophe theory of attitudes (Latané & Nowak, 1994).

Hypothesis 3a: Overall attitudes and behaviors will intercorrelate more strongly at the end of the study than at the beginning. This hypothesis tests for correlation as predicted by dynamic social impact theory (Latané, 1996).

Hypothesis 3b: More involving issues will intercorrelate to a greater extent than low involving issues. This hypothesis tests for constraints on dynamic social impact theory (Harton & Bourgeois, in press) as predicted by the catastrophe theory of attitudes (Latané & Nowak, 1994).

Hypothesis 4a: Overall attitude and behavior variance will decrease over time as the initial majority on a given issue will increase over time at the expense of minority views. This hypothesis tests for consolidation as predicted by dynamic social impact theory (Latané, 1996).

Hypothesis 4b: More involving issues will consolidate to a greater extent than low involving issues. This hypothesis tests for constraints on dynamic social impact theory (Harton & Bourgeois, in press) as predicted by the catastrophe theory of attitudes (Latané & Nowak, 1994).

Hypothesis 5: Initial minority views will persist over time. This hypothesis accounts for the continuing diversity prediction of dynamic social impact theory, as despite influence, minority attitudes will persist (Latané, 1996).

CHAPTER 3

PILOT STUDY

Ninety undergraduates taking 2002 summer courses completed a pilot study questionnaire for course credit. Participants responded to 70 evaluative statements and 47 behavioral items, indicating their level of agreement with each item and how important the item was to them using a 7-point Likert scale (1 = strongly disagree, 7 = strongly agree; and 1 = not very important, 7 = very important, respectively; see Appendix A). Based on these participants' responses I chose 19 items for use in the present study. These items had large standard deviations on the attitude measure, suggesting high variability in the responses, and low standard deviations on the importance measure, suggesting a generally agreed upon level of importance for each item. Table 1 lists the mean and standard deviation scores for participants' attitudinal and importance ratings for each of these items. Of the 19 items selected, six served as low importance items, nine as high importance items, and four as behavioral items.

Table 1

Attitude (Att) and Importance (Imp) Ratings of Selected Pilot Study Items

| | | Low Importance | | | |
|--------|--|-----------------|-----------|----------|-----------|
| Item | | Att M | Att SD | Imp M | Imp SD |
| 1. | The government is withholding information from the public on extra-terrestrial life forms. | 3.37 | 1.86 | 2.49 | 1.72 |
| 2. | Women in combat should have to take birth control pills. | 2.35 | 1.67 | 2.59 | 1.82 |
| 3. | Legalizing marijuana. | 3.72 | 2.10 | 2.77 | 1.87 |
| 4. | It's a good idea to automatically charge students a set fee each year for an all-activities pass so they can get into sporting events. | 2.87 | 2.10 | 3.71 | 2.03 |
| 5. | Making English the official language of Iowa. | 5.01 | 1.78 | 3.72 | 2.10 |
| 6. | Having sex with a stranger is okay. | 2.00 | 1.67 | 3.95 | 2.35 |
| Mean = | | 3.22 | 1.86 | 3.21 | 1.98 |
| | | High Importance | | | |
| Items | | Att M | Att SD | Imp M | Imp SD |
| 1. | Military intervention in Yugoslavia | 4.10 | 1.29 | 3.39 | 1.80 |
| 2. | Public Safety having guns. | 3.56 | 1.63 | 3.79 | 1.72 |
| 3. | Women working when their children are very young. | 4.35 | 1.59 | 4.31 | 1.74 |
| 4. | Illegal immigrants are taking jobs away from hard-working native-born Iowans. | 3.77 | 1.80 | 4.32 | 1.85 |
| 5. | Having sex before marriage is okay. | 4.62 | 1.84 | 4.46 | 1.98 |
| 6. | The death penalty should be reinstated in Iowa. | 3.42 | 2.21 | 4.85 | 1.92 |
| 7. | Abortion | 3.16 | 2.05 | 4.98 | 1.92 |
| 8. | Cloning another human being is completely unethical. | 5.00 | 2.04 | 5.01 | 1.77 |
| 9. | I feel safe on campus. | 4.90 | 1.64 | 5.91 | 1.40 |
| Mean = | | 4.10 | 1.68 | 4.56 | 1.79 |

Table continues

| | | Behaviors | | | |
|--------|--|-----------------|------------------|-----------------|------------------|
| | Item | Att <i>M</i> | Att <i>SD</i> | Imp <i>M</i> | Imp <i>SD</i> |
| 1. | I smoke regularly. | 2.01 | 2.00 | 2.67 | 2.35 |
| 2. | I drink alcohol regularly. | 3.16 | 1.83 | 2.81 | 1.91 |
| 3. | I eat 5 servings of fruit/vegetables a day. | 2.80 | 1.59 | 4.23 | 2.12 |
| 4. | I exercise regularly. | 4.60 | 1.78 | 5.33 | 1.52 |
| Mean = | | 3.14 | 1.80 | 3.76 | 1.98 |

Some of the items from the pilot study were modified before use in the present study. Items using first person singular language were reworded to make the items more person neutral. In addition, some items regarded dated content (e.g., "Military intervention in Yugoslavia"). These items were modified so as to regard the same general issue (e.g., use of military) using updated events (e.g., the recent conflict with Iraq). Moreover, two additional low importance items, five additional high importance items, and one additional behavioral item were added to these items for use in the present study (see Table 5 for a complete list of items). These additional items were generated based on their use in previous Surveys (e.g., Eaves, Eysenck, & Martin, 1989) and their applicability to campus programs.

CHAPTER 4

METHOD

Residence Halls

Four residence halls from the University of Northern Iowa were used in this study: Lawther, Hagemann, Shull, and Rider. These halls were selected because they were similar in size and design. Each hall contains eight houses (32 total) with 12-28 rooms in each. Each room contains 1-3 occupants. Lawther and Hagemann are all female halls, whereas Shull and Rider each have four male and four female houses. In addition, nearly every residence hall on campus contains one or two special interests houses. Accordingly, Lawther, Shull, and Rider each have some special interest houses. Lawther and Shull have 1 and 2 quiet life-style houses, respectively, and Rider has 2 substance-free houses. Quiet life-style houses have greater restrictions on volume than ordinary houses, whereas substance-free houses prohibit alcohol and tobacco products regardless of whether or not one is of legal age to use them. Some students opt to live in these special interest houses; however, others are often randomly assigned to these special interest houses if vacancies remain.

Participants

Participants were recruited from these four residence halls August 25th through August 27th, 2002, during their initial house meetings (see Appendixes B thru D).

Participants received an entry into a sweepstakes for each Survey they completed. Prizes included restaurant coupons, movie passes, CDs, gift certificates, electronics, and a \$100 cash prize (ranging from \$3 to \$100 in value) donated by local businesses and the research team (see Appendix E).

Participants were also recruited throughout the semester via flyer and email solicitation (see Appendixes F thru M). Flyers were placed at entrances and meeting areas of each house and hall at the beginning of each Survey. All residents received email notices at the beginning and near the end of each Survey. The number of students residing in the four residence halls in the Fall 2002 semester was 1371. Of these, 1252 responded to the demographic questions. Table 2 shows the gender, ethnicity, educational status, age, home region, and last year's housing status of participants who responded to each.

Table 2

Participant Demographics

| Variable | <i>M</i> | <i>SD</i> | <i>P</i> |
|-----------------------------|----------|-----------|----------|
| Gender | | | |
| Male | | | 20% |
| Female | | | 80% |
| Ethnicity | | | |
| Caucasian | | | 94% |
| African American | | | 2% |
| Asian or Pacific Islander | | | 1% |
| Other | | | 3% |
| Class | | | |
| Freshmen | | | 48% |
| Sophomore | | | 30% |
| Junior | | | 15% |
| Senior | | | 6% |
| Other | | | 1% |
| Age | 19 | 1.3 | |
| Region | | | |
| In-state | | | 94% |
| Out-of-state | | | 4% |
| International | | | 2% |
| Last year's living status | | | |
| First year at UNI | | | 56% |
| Off campus | | | 1% |
| On campus in same room | | | 12% |
| On campus in different room | | | 31% |

Of those who indicated their gender, 246 were male (20%) and 984 were female (80%). The majority of participants indicated their ethnicity as Caucasian (94%). Freshmen made up the largest portion of participants at

48%. The mean age of participants was 19 years ($SD = 1.3$ years). The majority of students were from Iowa (94%) and 56% of them did not attend UNI last year.

Design

As part of the larger UNI Dorm Study, residents were surveyed five times throughout the Fall 2002 semester. Table 3 shows the times of each survey as well as the type of items asked at each time.

Table 3

Survey Content by Time (T)

| Item type | T0 Week 1 | T1 Week 2 | T2 Week 6 | T3 Week 10 | T4 Week 13 |
|-------------------------------|--------------|--------------|--------------|---------------|---------------|
| Demographics | X | -- | -- | -- | -- |
| Attitude | -- | X | ½ | ½ | X |
| Importance | -- | X | ½ | ½ | X |
| Discussion | -- | -- | ½ | ½ | -- |
| Activities | -- | X | X | X | X |
| Interpersonal Interactions | -- | -- | X | X | -- |

Note: X = all items were included and ½ = randomly selected half of the items were included.

Demographic material was collected at the initial house meetings (August 25th-27th) early in Week 1 of the fall 2002 semester. Subsequent surveys were administered during Week 2 (August 31st-September 13th), Week 6 (September 28th-October 9th), Week 10 (October 25th-November 4th), and Week

13 (November 16th-November 27th). For each Survey, 79-89% of participants who responded did so within the first four days. Students had approximately two weeks to respond to each online Survey. An email thank you/reminder was sent to each participant after one week. The first and last Survey contained all the attitude, importance, and activity items, whereas the middle two Surveys each contained half those items. Items were randomly assigned to either the 2nd or 3rd Survey period. In addition, we also included discussion and friendship items in the four Surveys (see Table 3 for details on the timing of measures).

Procedure

Research assistants met with students during their initial house meetings (August 25th thru August 27th) to explain the study and collect informed consent and demographic information (see Appendixes B and C, respectively). This information was collected in sealed envelopes to insure confidentiality. Students who did not wish to participate were told to return blank questionnaires so that their lack of participation would not be obvious at the time of recruitment. All subsequent measures were administered online (see Appendixes N-R).

Email addresses were obtained from Registrar for all students residing in Hagemann, Lawther, Rider, and Shull. Additional email addresses obtained at the initial house meetings were added to a listserv. Residents received notification by email when each web-based survey was available. Emails were sent with the address list suppressed so that students' email addresses were not visible to others. Students received instructions in the initial email and at the beginning of each survey to complete the survey while alone. Students had approximately two weeks to respond to each online survey. After one week students received a thank you/reminder email. Each email contained a link to the Dorm Study homepage, from which participants could access a consent form and demographics questionnaire (if they had not completed them during their house meeting), a Frequently Asked Questions page, the current survey, and other links relevant to the study (Appendixes S-V). Each survey consisted of 70-90 items dispersed on five linked pages and took approximately 10-15 minutes to complete.

In order to track individual responses over time and compare people who share a common space (e.g., house, hall) to those that do not share that common space, participants

entered a personalized code derived from a combination of the last four digits of their social security numbers and their birth month and day on each Survey. These code numbers were also used in each Survey as participants' entry in the sweepstakes and an indicator of whether or not they took the Survey. Participants entered this code at the beginning of each new Survey. These were compared to a separate data file received from the Registrar that contained students' names, social security numbers, birthdates, and housing information, to match students by where they live.

Response rates per Survey are listed in Table 4. Generally, response rates, although diminishing over time, were quite good. During the first week of school (T0), when students were initially approached and asked to participate, 1086 (79%) of the 1371 residents responded by completing demographic information (see Appendix C). During the second week of the semester, 68% of the students completed the first Survey. During Week 13, 680 (50%) of the students completed the final Survey. Forty-three percent (590) of the residents participated in all four Surveys.

Table 4

| <i>Response Rate by Time of Survey (T)</i> | | | | |
|--|-------------------|------------------|------------------|-------------|
| | T0 | T1 | T4 | Actual |
| Hall and House | Week 1 | Week 2 | Week 13 | n's |
| Hagemann | 302 (92%) | 247 (75%) | 172 (52%) | 329 |
| Amy | 34 (100%) | 27 (82%) | 16 (47%) | 34 |
| Belle | 34 (83%) | 30 (73%) | 25 (61%) | 41 |
| Carrie | 44 (88%) | 41 (82%) | 31 (62%) | 50 |
| Cat | 41 (100%) | 28 (70%) | 20 (50%) | 40 |
| Charlie | 48 (100%) | 34 (71%) | 25 (52%) | 48 |
| Jackie | 26 (96%) | 23 (85%) | 15 (56%) | 27 |
| Jennie | 33 (80%) | 29 (71%) | 19 (46%) | 41 |
| Lannie | 41 (85%) | 34 (71%) | 21 (44%) | 48 |
| Lawther | 286 (74%) | 294 (76%) | 228 (59%) | 386 |
| Bella | 40 (82%) | 42 (86%) | 30 (61%) | 49 |
| Bordeau | 32 (65%) | 27 (55%) | 21 (43%) | 49 |
| Catava | 35 (66%) | 34 (64%) | 23 (43%) | 53 |
| Chablis | 52 (95%) | 52 (95%) | 39 (71%) | 55 |
| Cordey | 22 (59%) | 24 (65%) | 16 (43%) | 37 |
| Galliano | 25 (63%) | 33 (83%) | 25 (63%) | 40 |
| Reanult | 48 (79%) | 49 (80%) | 40 (66%) | 61 |
| Richelieu | 32 (76%) | 32 (76%) | 30 (71%) | 42 |
| Rider | 223 (71%) | 178 (57%) | 136 (43%) | 315 |
| Boies | 29 (81%) | 14 (39%) | 9 (25%) | 36 |
| Carpenter | 25 (56%) | 22 (49%) | 16 (36%) | 45 |
| Drake | 44 (96%) | 30 (65%) | 27 (59%) | 46 |
| Gear | 16 (80%) | 15 (75%) | 14 (70%) | 20 |
| Grimes | 38 (81%) | 28 (60%) | 18 (38%) | 47 |
| Jackson | 7 (14%) | 11 (22%) | 11 (22%) | 49 |
| Larrabee | 39 (95%) | 33 (80%) | 24 (59%) | 41 |
| Sherman | 25 (81%) | 23 (74%) | 17 (55%) | 31 |
| Shull | 275 (81%) | 217 (64%) | 144 (42%) | 341 |
| Aquila | 21 (55%) | 21 (55%) | 14 (37%) | 38 |
| Eclipse | 31 (78%) | 31 (78%) | 22 (55%) | 40 |
| Galaxy | 36 (75%) | 21 (44%) | 13 (27%) | 48 |
| Lacerta | 39 (87%) | 22 (49%) | 9 (20%) | 45 |
| Nunki | 51 (96%) | 40 (75%) | 33 (62%) | 53 |
| Shooting Star | 39 (95%) | 34 (83%) | 22 (54%) | 41 |
| Sunbeam | 48 (100%) | 36 (75%) | 25 (52%) | 48 |
| Titan | 11 (39%) | 13 (46%) | 6 (21%) | 28 |
| Total | 1086 (79%) | 936 (68%) | 680 (50%) | 1371 |

Measures

Attitudes

Fifteen items were selected from a pilot study to be low or high in initial importance to UNI college students. To the piloted items, an additional seven items were added. Low and high importance items were interspersed. Students first indicated their level of agreement with each attitude item. Later in the Survey, following some unrelated items and on a separate webpage, they indicated how important each issue relevant to the attitude items was to them personally, independent of their level of agreement with the item. This is a procedure recommended by Boninger, Krosnick, Berent, and Fabrigar (1995) for distinguishing between the importance of the attitude object and the importance of evaluative stance itself.

Low importance. Six attitude items used were rated as low in importance in the pilot study (see Table 1), with two additional items chosen by the researchers to be of low importance based on their content. Using 6-point Likert scales, participants rated their level of agreement with each item (1 = strongly disagree, 6 = strongly agree), how important the issue involved with each item was to them personally (1 = not very important, 6 = very important),

and the amount they discussed each issue in the last month with their housemates (1 = never, 6 = very often). For example, participants responded to attitude items such as, "The death penalty is barbaric and should continue to be outlawed in Iowa." Because the repeating of the items verbatim in Survey 1 puzzled some participants, shortened versions of the items (e.g., "the death penalty") were used for importance and discussion ratings (see Table 5 for a list of items on subsequent Surveys).

High importance. Nine attitude items used were rated as high in importance in the pilot study (see Table 1), with five additional items chosen by the researchers to be important based on their content. Participants rated their level of agreement, the level of importance of each issue, and the amount they discussed each item, respectively, using the same scales as used for the low importance attitudes (see Table 5 for a list of items).

Table 5

Low and High Importance Attitude ItemsLow Importance

1. Athletes should get to sign up for classes before all other students.
2. Marijuana use should be legalized.
3. The government is withholding information from the public on extra-terrestrial life forms.
4. Its okay to have sex with someone you just met.
5. It is a bad idea to join a fraternity/sorority.
6. Women in combat should have to take birth control pills.
7. The English only laws in Iowa are a good idea.
8. It is a good idea to automatically charge students a set fee each year for an all-activities pass so they can get into campus events.

High Importance

1. Living with your romantic partner before marriage is a good idea.
2. Refugees should be left to fend for themselves.
3. The death penalty is barbaric and should continue to be outlawed in Iowa.
4. Campus Public Safety officers should carry guns.
5. Cloning another human being is completely unethical.
6. Liberal arts core (gen ed.) classes are a waste of time.
7. Abortion should be freely available on demand.
8. Illegal immigrants are taking jobs away from hard-working native-born Iowans.
9. It is safe for a woman to walk alone on campus at night.
10. The U.S. should use military force in Iraq.
11. Women should not work when their children are very young.
12. If I heard a woman yelling or screaming in another dorm room, I wouldn't know what I could do.
13. Women tend to exaggerate how much rape affects them.
14. A man should never have sex with a woman who is drunk.

Activities

In addition to the attitude items, participants responded to five items inquiring about the frequency with which they engaged in various behaviors or activities over the previous month. These items were also derived from the pilot data. The items asked participants under what circumstances and to what extent they smoked and/or drank alcohol, exercised, and ate fruits and/or vegetables. For a complete list of the items, refer to Table 6.

Table 6

Behavioral Items

-
1. Exercise
 2. Smoke cigarettes
 3. Drink alcoholic beverages
 4. Eat at least 5 servings of fruits and vegetables per day?
 5. In the last month, how many alcoholic beverages did you usually consume on any given occasion?
-

Interpersonal Interactions

Finally, participants responded to five items asking how much they interacted with their roommate, housemates, and hallmates in the previous seven days. At Time 2, participants indicated up to six of their closest friends and where each of them lived (i.e., same house, same hall

but different house, on-campus but different hall, off campus). Participants also indicated whether they were friends with their roommate at this time (see Appendixes O and R). At Time 3, participants indicated up to six conversations they had (10 minutes or longer) the previous day and where the people involved in the conversations lived. Participants also indicated the medium of the conversations (i.e., on the phone, online, face to face) at this time. Participants used initials and room numbers instead of names to indicate friends and conversers (see Appendixes P and R).

Plan of Analysis

Although the 2002 UNI Dorm Study focused on how attitudes change and social norms develop over time and measured these four times throughout the semester, the present study will limit analysis of the attitude and behavioral items to data from the first and final Surveys, because they provide the most direct test of the hypotheses.

Hypothesis 1: Students who share a common space (e.g., house, hall) will interact more and befriend each other more than students who do not share that common space. This hypothesis tests the immediacy factor of social impact theory (Latané, 1981).

To investigate this hypothesis, at Time 2 participants indicated up to six of their closest friends and where they lived (i.e., in the participants' house, in the participants' hall, but in a different house, on-campus but in a different hall, or off-campus). At Time 3 participants indicated up to 6 conversations they had and where their fellow conversers lived on the same sociometric scale used in the friendship items. To test this hypothesis I compared the percentage of friends in each sociometric space using a repeated-measures ANOVA. I followed the same procedure for conversers.

Hypothesis 2a: Students who share a common space will become more similar in their attitudes and behaviors over time. This hypothesis tests for geographical clustering as predicted by dynamic social impact theory (Latané, 1996).

To investigate Hypothesis 2a, I analyzed the data using nested ANOVAs with house nested within hall at Time 1 and at Time 4. This analysis shows the degree to which the houses differed while accounting for the fact that houses are contained in different halls. I then compared the effect size of the house for each issue at Time 1 to the effect size of the house for each issue at Time 4 by computing an effect size difference score. The direction of the difference scores (i.e., increasing or decreasing over

time) were compared using a sign test. I expected the house effect sizes to increase over time.

I also expected that the house effect would not be significant at Time 1 but would become so by Time 4. To test the house X time effect, I ran a repeated-measures ANOVA with house nested within hall for each attitude and behavioral item.

Hypothesis 2b: More involving issues will cluster to a greater extent than low involving issues. This hypothesis tests for constraints on dynamic social impact theory (Harton & Bourgeois, in press) as predicted by the catastrophe theory of attitudes (Latané & Nowak, 1994).

To investigate Hypothesis 2b, I ran separate sign tests for high and low importance attitude items. I expected that high importance items would increase in clustering over time but did not expect low importance items to do so. I also compared the house X time interaction effect sizes of the high and low importance items using an independent samples *t*-test. I expected that the house X time effect size would be higher for high importance items than for low importance items.

Hypothesis 3a: Overall attitudes and behaviors will intercorrelate more strongly at the end of the study than at the beginning. This hypothesis tests for correlation as predicted by dynamic social impact theory (Latané, 1996).

To investigate Hypothesis 3a I created overall correlations matrices for Time 1 and Time 4. The absolute value Pearson's correlations were transformed into z-scores. I then compared Time 1 and Time 4 scores using a paired t-test. I expected that the items would be more inter-related at Time 4 than at Time 1. To control for sample size disparities between Time 1 and 4, I only included participants who responded at both times.

Hypothesis 3b: More involving issues will correlate to a greater extent than low involving issues. This hypothesis tests for constraints on dynamic social impact theory (Harton & Bourgeois, in press) as predicted by the catastrophe theory of attitudes (Latané & Nowak, 1994).

To test, Hypothesis 3b, I followed the same procedure for attitudes toward low and high important issues separately. Issues of high importance were expected to be more strongly intercorrelated at the end of the study than issues of low importance.

Hypothesis 4a: Overall attitude and behavior variance will decrease over time as the initial majority on a given issue will increase at the expense of minority views. This hypothesis tests for consolidation as predicted by dynamic social impact theory (Latané, 1996).

To investigate Hypothesis 4a, I computed Time 1 and Time 4 variance for each item and a variance difference score for each item. To control for sample size disparities

between Time 1 and 4, I only included participants who responded at both times. I expected that the variance would decrease over time. I tested this by running a sign test on the direction of the difference scores.

Another measure of consolidation is minority size. To measure this, I collapsed attitude and behavioral items into dichotomous variables. For example, instead of a participant's rating of an attitude item ranging on a scale of -3 to +3, the participants' rating of an attitude item was collapsed into either a negative or positive rating of the item. I then compared the percentage in the minority at Time 1 to the percentage in the minority at Time 4 by running a sign test on the direction of the difference scores. To control for sample size disparities between Time 1 and 4, I only included participants who responded at both times. I expected that overall variance and minority size would decrease over time.

Hypothesis 4b: More involving issues will consolidate to a greater extent than low involving issues. This hypothesis tests for constraints on dynamic social impact theory (Harton & Bourgeois, in press) as predicted by the catastrophe theory of attitudes (Latané & Nowak, 1994).

To test Hypothesis 4b, I ran separate sign tests for high and low importance items variance and minority size. I expected that high importance items would decrease in

variance and minority size but did not expect low importance items to decrease in variance and minority size.

Hypothesis 5: Initial minority views will persist over time. This hypothesis accounts for the continuing diversity prediction of dynamic social impact theory, as despite influence, minority attitudes will persist (Latané, 1996).

Hypothesis 5 qualifies hypotheses 4a and 4b in that, although DSIT predicts that minority size will decrease over time, it does not predict unanimity to occur.

Investigation of this descriptive hypothesis involved looking at the variance and percentage in the minority for each attitude and behavioral variance. I did not expect any variance or minority size to reach zero.

CHAPTER 5

RESULTS

Hypotheses 2a and 2b investigated change in attitudes and behaviors at the level of the house. Because some houses had a small number of response rates, all participants who responded at Time 1 and at Time 4, regardless of whether they responded to both, were included when computing the house effect sizes at each time. With the exception of this portion of Hypotheses 2a and 2b, only participants who responded at both Time 1 and Time 4 were used so as to control for sample size disparities between the two Survey periods. Forty-three percent (590) of the residents completed Survey 1 and 4.

Manipulation Check

To test whether the low and high importance items were perceived by participants as the pilot data suggested they would be, participants' importance ratings for the low and high importance items at Time 1 were averaged and their low and high importance means were compared using a paired *t*-test. Participants rated low importance items as less important than high importance items ($M_s = 3.24$ and 4.07 respectively), $t(865) = -35.61$, $p < .001$. These data are in congruence with the pilot data, suggesting that

perceived involvement of these items are stable for this population.

Hypotheses Testing

Hypothesis 1: Students who share a common space (e.g., house, hall) will interact more and befriend each other more than students who do not share that common space. This hypothesis tests the immediacy factor of social impact theory (Latané, 1981).

At Time 2 of the study, participants indicated up to 6 of their closest friends and where they lived. At Time 3 participants indicated up to 6 conversations they had that lasted 10 minutes or longer and where their fellow conversers lived. Table 7 shows the percentage of friends and conversers who lived in each level of space relative to the participants.

Table 7

Percentage of Students' Friends and Conversers by Level of

Shared Space

| Location | Friends | Conversers |
|-------------------------------|---------|------------|
| Same House | 33% | 37% |
| Same Hall but different House | 18% | 18% |
| On-campus but different Hall | 27% | 24% |
| Off-campus | 22% | 21% |

Note: $n = 780$ for friends, $n = 714$ for conversers

Participants most often reported fellow housemates as friends, $F(3, 2337) = 34.23, p < .001, \eta^2 = .12$. Within-participants contrasts revealed that the percentage of friends who lived in the same house as participants was significantly greater than the percentage of friends who lived in the same hall but in a different house ($F(1, 779) = 86.42, p < .001$), on-campus but in a different hall ($F(1, 779) = 10.22, p = .001$), or off-campus ($F(1, 779) = 40.52, p < .001$). This finding is consistent with previous research (e.g., Byrne, 1961; Festinger et al., 1950; Newcomb et al., 1967; Latané et al., 1995), suggesting that proximity plays a key role in friendship formation. This finding is even more impressive considering that the number living within the same house (16-60) is only a small fraction of the total number living on-campus (approximately 4,121) and pales in comparison to the total number living off-campus (world's population minus 4,121).

Although friendship formation is one likely avenue for reciprocal influence (Festinger et al., 1950), it may not be a requirement for influence to occur. That is, two people need not have a close bond in order to influence one another. To test for proximity effects in less formal

relationships, I also examined with whom participants were conversing.

In a similar vein, participants most often conversed with housemates, $F(3, 2139) = 51.71, p < .001, \eta^2 = .15$. Within-participants contrasts showed that the percentage of conversers who lived in the same house as participants was significantly greater than the percentage of conversers who lived in the same hall but in a different house ($F\{1, 713\} = 108.47, p < .001$), on-campus but in a different hall ($F\{1, 713\} = 53.53, p < .001$), or off-campus ($F\{1, 713\} = 88.45, p < .001$). Building on previous literature, this finding suggests that proximity affects not only whom one befriends, but also with whom one converses.

In sum, these results shows support for the immediacy factor of social impact theory in predicting several types of interpersonal interactions, namely friendship formation and conversation, supporting Hypothesis 1.

Hypothesis 2a: Students who share a common space will become more similar in their attitudes and behaviors over time. This hypothesis tests for geographical clustering predicted by dynamic social impact theory (Latané, 1996).

Hypothesis 2b: More involving issues will cluster to a greater extent than low involving issues. This hypothesis tests for constraints on dynamic social impact theory (Harton & Bourgeois, in press) as predicted by the catastrophe theory of attitudes (Latané & Nowak, 1994).

To test Hypothesis 2a, the data were analyzed using nested ANOVAs with house nested within hall. This analysis shows the degree to which the houses differed while accounting for the fact that houses are contained in different halls. The overall effect size of the house nested within hall for each item at each time indicates to what extent participants' attitudes and behaviors are explained by where they live. Table 8 shows the house nested within hall effect size and significance level for each item at Time 1 and Time 4 as well as the change in effect size.

The direction of change (i.e., decreasing or increasing) was compared for the items using a sign test. House effect size increased for 23 of the 27 attitude and behavior items. This increase is significantly more than would be expected due to chance alone, $p < .0001$. Participants who lived in the same house grew more similar in their attitudes and behaviors over time, although the size of the change was small.

Table 8

Effect Size of House on Attitude and Behavioral Items

| Attitude Items | | | |
|--|----------------|----------------|--------------------|
| Low Importance | T1 η^2 | T4 η^2 | η^2 change |
| 1. Athletes should get to sign up for classes before all other students. | .042 | .056 | .014 |
| 2. Marijuana use should be legalized. | .114*** | .125*** | .011 |
| 3. The government is withholding information from the public on extra-terrestrial life forms. | .081*** | .087** | .006 |
| 4. It's okay to have sex with someone you just met. | .200*** | .235*** | .035 |
| 5. It is a bad idea to join a fraternity/sorority. | .079*** | .069* | -.010 |
| 6. Women in combat should have to take birth control pills. | .050* | .060 | .010 |
| 7. The English only laws in Iowa are a good idea. | .062** | .070* | .008 |
| 8. It is a good idea to automatically charge students a set fee each year for an all-activities pass so they can get into campus events. | .049* | .064 | .015 |
| Mean = | .085*** | .096*** | .011 |
| Attitude Items | | | |
| High Importance | T1 η^2 | T4 η^2 | η^2 change |
| 1. Living with your romantic partner before marriage is a good idea. | .084*** | .088** | .004 |
| 2. Refugees should be left to fend for themselves. | .093*** | .084** | -.009 |
| 3. If I heard a woman yelling or screaming in another dorm room, I wouldn't know what I could do. | .049 | .044 | .005 |
| 4. The death penalty is barbaric and should continue to be outlawed in Iowa. | .049* | .071* | .022 |
| 5. Campus Public Safety officers should carry guns. | .036 | .054 | .018 |
| 6. Cloning another human being is completely unethical. | .038 | .094*** | .056 |
| 7. Liberal arts core classes are a waste of time. | .045 | .049 | -.004 |
| 8. Abortion should be freely available on demand. | .058** | .082** | .024 |
| 9. Women tend to exaggerate how much rape affects them. | .049* | .091** | .042 |
| 10. Illegal immigrants are taking jobs away from hard-working native-born Iowans. | .053* | .067* | .014 |
| 11. It is safe for a woman to walk alone on campus at night. | .061** | .067* | .006 |

Table Continues

| Attitude Items | | | |
|---|----------------|----------------|--------------------|
| | T1 η^2 | T4 η^2 | η^2 change |
| High Importance | | | |
| 12. The U.S. should use military force in Iraq. | .034 | .069* | .035 |
| 13. Women should not work when their children are very young. | .045 | .053 | .008 |
| 14. A man should never have sex with a woman who is drunk. | .033 | .087** | .054 |
| Means = | .052* | .069* | .017 |
| Behavioral Items | | | |
| 1. Exercise | .064** | .063 | -.001 |
| 2. Smoke cigarettes | .060** | .062 | .002 |
| 3. Drink alcoholic beverages | .079*** | .152*** | .073 |
| 4. Eat at least 5 servings of fruits and vegetables per day? | .035 | .063 | .028 |
| 5. In the last month, how many alcoholic did you usually consume on any given occasion? | .101*** | .123*** | .022 |
| Means = | .068** | .093*** | .025 |

Note: Time 1 n's = 907-920, Time 4 n's = 641-663, * = $p \leq .05$, ** = $p \leq .01$, *** = $p \leq .001$.

To test Hypothesis 2b, sign tests were run for high and low attitude items separately. House effect size increased for seven of the eight low importance items, significantly more than expected by chance ($p = .035$). Furthermore, house effect size increased for 12 of the 14 high importance items, again significantly more than expected by chance ($p = .0056$). Independent sample t-tests at Time 1, Time 4, and for the effect size change failed to reveal any significant difference in house effect size between high and low importance items, $ps > .18$. Issue importance did not appear to constrain clustering. In other words, participants did not seem to become more similar to those they lived with on high importance issues than they

did on low importance issues, although the change in effect size for high importance issues was slightly greater than that of low importance issues.

In summary, the effect of where participants lived on their attitudes and behaviors increased over time more often than expected by chance for both low and high importance issues.

I also ran a repeated-measures ANOVA on each attitude and behavioral item with house nested in hall as the independent variable. This analysis differs from the previous in that it only considers the house by time interaction effect size and accordingly only utilizes responses of participants who responded at both Time 1 and Time 4. Table 9 displays the house X time effect sizes.

Four attitude items approached statistical significance (see Table 9). Of them, only one low importance item ("It is a bad idea to join a fraternity/sorority") approached significance, $F(31, 565) = 1.36$, $p = .093$, $\eta^2 = .069$. The following high importance items also approached significance: "Women tend to exaggerate how much rape affects them," $F(31, 567) = 1.37$, $p = .092$, $\eta^2 = .070$; "Women should not work when their

children are very young," $F(567, 31) = 1.36, p = .093, \eta^2 = .069$; "A man should never have sex with a woman who is drunk," $F(31, 568) = 1.44, p = .06, \eta^2 = .073$, respectively.

Table 9

House by Time Effect Size on Attitude and Behavioral Items

| Attitude Items | | η^2 |
|--|--------|----------|
| Low Importance | | |
| 1. Athletes should get to sign up for classes before all other students. | | .056 |
| 2. Marijuana use should be legalized. | | .068 |
| 3. The government is withholding information from the public on extra-terrestrial life forms. | | .046 |
| 4. It's okay to have sex with someone you just met. | | .056 |
| 5. It is a bad idea to join a fraternity/sorority. | | .069* |
| 6. Women in combat should have to take birth control pills. | | .054 |
| 7. The English only laws in Iowa are a good idea. | | .045 |
| 8. It is a good idea to automatically charge students a set fee each year for an all-activities pass so they can get into campus events. | | .060 |
| | Mean = | .057 |
| High Importance | | |
| 1. Living with your romantic partner before marriage is a good idea. | | .044 |
| 2. Refugees should be left to fend for themselves. | | .064 |
| 3. If I heard a woman yelling or screaming in another dorm room, I wouldn't know what I could do. | | .043 |
| 4. The death penalty is barbaric and should continue to be outlawed in Iowa. | | .051 |
| 5. Campus Public Safety officers should carry guns. | | .058 |
| 6. Cloning another human being is completely unethical. | | .043 |
| 7. Liberal arts core classes are a waste of time. | | .058 |
| 8. Abortion should be freely available on demand. | | .036 |
| 9. Women tend to exaggerate how much rape affects them. | | .070* |

Table Continues

| Attitude Items | | η^2 |
|---|--------|----------|
| High Importance | | |
| 10. Illegal immigrants are taking jobs away from hard-working native-born Iowans. | | .066 |
| 11. It is safe for a woman to walk alone on campus at night. | | .068 |
| 12. The U.S. should use military force in Iraq. | | .065 |
| 13. Women should not work when their children are very young. | | .069* |
| 14. A man should never have sex with a woman who is drunk. | | .073* |
| | Mean = | .065 |
| Behavioral Items | | η^2 |
| 1. Exercise | | .059 |
| 2. Smoke cigarettes | | .067 |
| 3. Drink alcoholic beverages | | .086** |
| 4. Eat at least 5 servings of fruits and vegetables per day? | | .086*** |
| 5. How many alcoholic beverages did you usually consume on any given occasion? | | .042 |
| | Mean = | .068 |

Note = n's = 551-571, $p < .10$, ** = $p < .05$, *** = $p < .001$

In addition, two behavioral items reached conventional significance levels (see Table 9). The frequency with which participants drank alcoholic beverages in the previous month became significantly more similar to that of their housemates over time, $F(31, 550) = 1.67$, $p = .014$, $\eta^2 = .086$. The frequency with which participants ate fruits and vegetables in the previous month also became significantly more similar to that of their housemates over time, $F(31, 568) = 1.73$, $p = .009$, $\eta^2 = .086$.

To test Hypothesis 2b, house X time effect size served as the dependent variable and importance of the items (low or high) served as the independent variable. The mean low

and high importance house X time effect sizes were compared using an independent sample *t*-test, *ns*.

In sum, the effect of where participants live on their attitudes and behaviors increased over time more often than expected by chance for both low and high importance issues. However, the house by time interaction effect was only significant for two behavioral items and approached significance for four attitude items, three of which were high importance items. Hypothesis 2a was partially supported. There was no difference in effect size for low vs. high importance items. Hypothesis 2b was not supported.

Hypothesis 3a: Overall attitudes and behaviors will intercorrelate more strongly at the end of the study than at the beginning. This hypothesis tests for correlation predicted by dynamic social impact theory (Latané, 1996).

Hypothesis 3b: More involving issues will correlate to a greater extent than low involving issues. This hypothesis tests for constraints on dynamic social impact theory (Harton & Bourgeois, in press) as predicted by the catastrophe theory of attitudes (Latané & Nowak, 1994).

To test Hypothesis 3a, all items were intercorrelated and absolute value Pearson's correlations were transformed into Fisher's *z*-scores for Time 1 and Time 4 and averaged. The mean magnitudes at Time 1 ($M = .086$) and at Time 4 ($M = .091$) were both significant ($p < .05$, $p < .03$, respectively).

The absolute value Fisher's z -scores of all the correlations from Time 1 were compared to the z -scores of all the correlations from Time 4 using a paired t -test. The mean z -scores of the correlations increased significantly over time, $t(350) = 2.27$, $p = .024$. The items became more inter-related over time. This finding is precisely what one would expect given the support found for Hypothesis 1 and 2, namely that participants interacted and became more similar to those they lived with over time. The same people who participants reciprocally influenced on one issue were also reciprocally influenced on another.

To test Hypothesis 3b, the same procedures were run for low and high importance items separately. For low important issues, the mean magnitude at Time 1 ($M = .086$) was significant, $p < .05$ and decreased in Time 4 ($M = .075$), $p < .08$. This decrease in magnitude over time, however, was not significant, $t(27) = 1.55$, $p = .134$. For high importance issues, the mean magnitude at Time 1 ($M = .085$) was significant, $p < .03$, as was the mean magnitude at Time 4 ($M = .103$), $p < .01$. In addition, the mean magnitude significantly increased over time, $t(90) = 3.31$, $p = .002$.

In sum, the relationship between various attitudes and behaviors appears to increase over time; however, in attitudes this summation appears to be qualified by the level of importance of the issues. Issues of higher importance co-varied increasingly over time, whereas issues of low importance did not become more intercorrelated.

Hypothesis 3a and 3b were supported.

Hypothesis 4a: Overall attitude and behavior variance will decrease over time as the initial majority on a given issue will increase over time at the expense of minority views. This hypothesis tests for consolidation as predicted by dynamic social impact theory (Latané, 1996).

Hypothesis 4b: More involving issues will consolidate to a greater extent than low involving issues. This hypothesis tests for constraints on dynamic social impact theory (Harton & Bourgeois, in press) as predicted by the catastrophe theory of attitudes (Latané & Nowak, 1994).

Hypothesis 5: Initial minority views will persist over time. This hypothesis accounts for the continuing diversity prediction of dynamic social impact theory, as despite influence, minority attitudes will persist (Latané, 1996).

To test Hypothesis 4a, I computed the Time 1 and Time 4 variance and ran a sign test on the difference scores (see Table 10). The variance decreased for 13 of the 27 items, *ns*. To test Hypothesis 4b, sign tests were run separately for low and high importance attitude items. For the low importance items, variance actually increased for seven of the eight items, $p = .035$. For the high importance

items, variance decreased for 9 of the 14 items, *ns.* In sum, the variance of the items used did not seem to decrease over time. In fact, in the case of the low importance items, the variance actually increased over time.

Table 10

Time 1 and Time 4 Attitude and Behavioral Variance

| Attitude Items | | | | |
|--|--------|-------|--------|-------|
| Low Importance | T1 | T4 | Change | |
| 1. Athletes should get to sign up for classes before all other students. | 1.752 | 2.279 | -0.527 | |
| 2. Marijuana use should be legalized. | 3.225 | 3.405 | -0.180 | |
| 3. The government is withholding information from the public on extra-terrestrial life forms. | 3.423 | 3.184 | 0.239 | |
| 4. It's okay to have sex with someone you just met. | 1.855 | 2.367 | -0.512 | |
| 5. It is a bad idea to join fraternity/sorority. | 2.564 | 2.686 | -0.122 | |
| 6. Women in combat should have to take birth control pills. | 2.613 | 2.678 | -0.065 | |
| 7. The English only laws in Iowa are a good idea. | 3.890 | 3.704 | 0.186 | |
| 8. It is a good idea to automatically charge students a set fee each year for an all-activities pass so they can get into campus events. | 4.918 | 4.507 | 0.411 | |
| | Mean = | 3.030 | 3.101 | 0.071 |
| High Importance | T1 | T4 | Change | |
| 1. Living with your romantic partner before marriage is a good idea. | 4.399 | 4.292 | 0.107 | |
| 2. Refugees should be left to fend for themselves. | 1.745 | 1.621 | 0.124 | |
| 3. If I heard a woman yelling or screaming in another dorm room, I wouldn't know what to do. | 3.922 | 3.698 | 0.224 | |
| 4. The death penalty is barbaric and should continue to be outlawed in Iowa. | 2.506 | 2.591 | -0.085 | |
| 5. Campus Public Safety officers should carry guns. | 4.765 | 3.643 | 1.122 | |

Table Continues

| Attitude Items | | | | |
|---|--------|-------|--------|--------|
| High Importance | T1 | T4 | Change | |
| 6. Cloning another human being is completely unethical. | 3.155 | 3.647 | -0.492 | |
| 7. Liberal arts core classes are a waste of time. | 4.102 | 3.702 | 0.400 | |
| 8. Abortion should be freely available on demand. | 3.167 | 2.990 | 0.177 | |
| 9. Women tend to exaggerate how much rape affects them. | 2.696 | 3.071 | -0.375 | |
| 10. Illegal immigrants are taking jobs away from hard-working native-born Iowans. | 2.933 | 2.894 | 0.039 | |
| 11. It is safe for a woman to walk alone on campus at night. | 3.322 | 3.327 | -0.005 | |
| 12. The U.S. should use military force in Iraq. | 2.618 | 2.610 | 0.008 | |
| 13. Women should not work when their children are very young. | 1.051 | 1.595 | -0.544 | |
| 14. A man should never have sex with a woman who is drunk. | 3.057 | 3.050 | 0.007 | |
| | Mean = | 3.103 | 3.052 | 0.051 |
| Behavioral Items | | | | |
| | T1 | T4 | change | |
| 1. Exercise | 1.190 | 1.550 | -0.360 | |
| 2. Smoke cigarettes | 0.910 | 0.901 | 0.009 | |
| 3. Drink alcoholic beverages | 0.790 | 0.904 | -0.114 | |
| 4. Eat at least 5 servings of fruits and vegetables per day. | 1.368 | 1.395 | -0.027 | |
| 5. In the last month, how many alcoholic beverages did you usually consume on any given occasion? | 1.516 | 1.784 | -0.268 | |
| | Mean = | 1.155 | 1.307 | -0.152 |

Note: n's = 594-604.

Variance shows consolidation by a decrease in the average distribution of responses. Another measure of consolidation is a reduction in minority size. To measure this, attitude and behavioral items were collapsed into dichotomous variables. The attitude item responses were collapsed into either positive or negative stances toward each item and the percentage holding the minority view at Time 1 was compared to the percentage holding that view at

Time 4 using a sign test (see Table 11). The responses to the behavioral items were collapsed into those who performed the behavior and those who did not. Table 11 displays the minority size for each item.

Table 11

Minority size of Items at Time 1 and Time 4

| Attitude Items | | | | |
|--|--------|-----|----------|-----|
| Low Importance | T1 | T4 | Decrease | |
| 1. Athletes should get to sign up for classes before all other students. | 9% | 12% | -3% | |
| 2. Marijuana use should be legalized. | 20% | 28% | -8% | |
| 3. The government is withholding information from the public on extra-terrestrial life forms. | 34% | 30% | 4% | |
| 4. It's okay to have sex with someone you just met. | 9% | 13% | -4% | |
| 5. It is a bad idea to join a fraternity/sorority. | 34% | 39% | -5% | |
| 6. Women in combat should have to take birth control pills. | 21% | 24% | -3% | |
| 7. The English only laws in Iowa are a good idea. | 48% | 48% | 0% | |
| 8. It is a good idea to automatically charge students a set fee each year for an all-activities pass so they can get into campus events. | 46% | 52% | -6% | |
| | Mean = | 28% | 31% | -3% |
| High Importance | T1 | T4 | Decrease | |
| 1. Living with your romantic partner before marriage is a good idea. | 52% | 44% | 8% | |
| 2. Refugees should be left to fend for themselves. | 13% | 12% | 1% | |
| 3. If I heard a woman yelling or screaming in another dorm room, I wouldn't know what I could do. | 19% | 23% | -4% | |
| 4. The death penalty is barbaric and should continue to be outlawed in Iowa. | 39% | 50% | -11% | |
| 5. Campus Public Safety officers should carry guns. | 20% | 19% | 1% | |
| 6. Cloning another human being is completely unethical. | 35% | 29% | 6% | |
| 7. Liberal arts core classes are a waste of time. | 31% | 43% | -12% | |
| 8. Abortion should be freely available on demand. | 27% | 26% | 1% | |
| 9. Women tend to exaggerate how much rape affects them. | 4% | 8% | -4% | |
| 10. Illegal immigrants are taking jobs away from hard-working native-born Iowans. | 39% | 38% | 1% | |

Table Continues

| Attitude Items | | | | |
|---|-----|-----|----------|--|
| High Importance | T1 | T4 | Decrease | |
| 11. It is safe for a woman to walk alone on campus at night. | 22% | 35% | -13% | |
| 12. The U.S. should use military force in Iraq. | 45% | 38% | 7% | |
| 13. Women should not work when their children are very young. | 37% | 42% | -5% | |
| 14. A man should never have sex with a woman who is drunk. | 23% | 23% | 0% | |
| Mean = | 29% | 31% | -2% | |
| Behavioral Items | | | | |
| | T1 | T4 | Decrease | |
| 1. Exercise | 4% | 13% | -9% | |
| 2. Smoke cigarettes | 17% | 13% | 4% | |
| 3. Drink alcoholic beverages | 41% | 41% | 0% | |
| 4. Eat at least 5 servings of fruits and vegetables per day. | 13% | 20% | -7% | |
| 5. In the last month, how many alcoholic beverages did you usually consume on any given occasion? | 42% | 42% | 0% | |
| Mean = | 23% | 26% | -3% | |

Note: n's = 594-604

The percentage of participants holding the minority view for four of the 27 items did not change over time and were excluded from analysis. Of the remaining 23 items, the minority increased for 14 of the items, approaching significance ($p = .06$) in the opposite direction than hypothesized.

To test Hypothesis 4b, separate sign tests were run on low and high importance items, excluding those that did not change between Time 1 and Time 4. The minority size increased for six of the seven remaining low importance items, approaching significance ($p = .06$). The minority size decreased for seven of the 13 remaining high importance items, *ns*. In sum, the minority measure of

consolidation revealed similar results to the variance measure of consolidation; for these items, minority size either did not decrease over time, or in the case of low importance items, actually increased over time. Hypothesis 4a and 4b were not supported.

Furthermore, Hypothesis 5 predicted that despite consolidation, diversity would continue. As illustrated in Tables 10 and 11, those in the minorities persisted over time and in some cases even increased in size. Thus Hypothesis 5 was supported.

CHAPTER 6

DISCUSSION

Dynamic social impact theory (Latané, 1996), a meta-theory of social influence, proposes that group culture originates and changes through the dynamic process of individuals who share a common space influencing one another. However, research testing DSIT in the real world is limited in number and scope. The two published studies in a real world setting (Bourgeois & Bowen, 2001; Bowen & Bourgeois, 2001) only surveyed participants on a limited number of items and at a single point in time. These studies also did not explore how involvement and communication may affect social impact.

The present study tracked the attitudes and behaviors of participants in four college residence halls over an 11 week period. This study offered a large scale field test of DSIT's (Latané, 1996) predictions of clustering, correlation, consolidation, and continued diversity and the catastrophe theory of attitudes' (Latané & Nowak, 1994) prediction that the level of involvement of an issue will modify the degree and type of attitude change and therefore modify DSIT's predictions.

The Ecology of Interpersonal Interaction

Social impact theory (Latané, 1981) postulates that social influence occurs through communication and that people communicate more with those closest to them. In support of this postulate, proximity played a substantial role in participants' interpersonal interactions. Participants befriended and conversed with their fellow housemates more than they did with their hallmates, other on-campus residents, and people living off-campus. This is in congruence with previous research, illustrating that most of the time people interact in small face-to-face groups with those most immediate to them (Byrne, 1961; Festinger et al., 1950; Latané et al., 1995). Even in the age of instant/mass communication, 87% of the conversations participants reported were face-to-face, with only 8% occurring on the phone and 5% occurring online. Furthermore, 60% of those conversations occurred with just one other person and 31% with two or three other persons. Also of note, participants interacted the least with hallmates living outside their house. This may be related to psychological stress often experienced during extended social interaction in high density living environments (Baum & Davis, 1980; Newman, 1976). Milgram (1977), in his

research on the familiar stranger, suggests that people often cope in high density living environments by limiting their social interaction with those who cross their paths regularly but are not directly involved in their daily lives.

Clustering

Dynamic social impact theory (Latané, 1996) predicts geographical clustering of attitudes and behaviors to occur as an outcome of disproportional interaction with those most immediate. In partial support of this prediction, participants who lived in the same house grew more similar over time for nearly all attitudes and behaviors measured, although the effect size of the change was small. A repeated measures analysis, using only those participants who completed the survey at both times, however, only showed a significant increase in clustering on two behavioral items and approached significance for four attitude items. The attitude items that approached significance may have been ones that were more relevant or communicated more often than the non significant items. Three of these four items regarded issues particularly relevant to women (see Table 9). Given that 80% of the

participants were women (see Table 2), this conclusion seems sound.

The difference in findings between the sign test analysis and the repeated measure analysis likely stems from particular characteristics of each analysis. The sign test measured the direction of change across all items and allowed for a larger n per house than the repeated-measures analysis. The sign test showed that an increase in the house effect over time occurred more often than expected by chance. The repeated-measures analysis looked for an interaction between house and time per individual item and only included participants who responded at Time 1 and Time 4. If there already was a house effect at Time 1, this would reduce the likelihood of finding a significant interaction.

Finding an increase in clustering, even if small and only partially supported, builds on previous field research (e.g., Bourgeois & Bowen, 2001; Bowen & Bourgeois, 2001) in that this study measured clustering over time instead of at a single point near the end of the school year. This study also extends previous research in more controlled settings (e.g., Harton et al., 1998; Latané & Bourgeois, 1996) in that discussion of the issues measured was not controlled

and the post discussion measure of change in degree of clustering may not have immediately followed discussion of the issue. If the frequency at which issues were discussed and the interval between discussion and post discussion measures were held constant, the result would likely to have been stronger. Furthermore, change in the degree of clustering may likely be stronger over the course of the school year than in the 11 week period provided in this study.

Correlation

DSIT (Latané, 1996) also predicts that attitudes and behaviors will increasingly co-vary in a population as reciprocal influencers of one issue will likely be the same reciprocal influencers of other issues. In support of this prediction, the mean magnitude of the intercorrelations of the items increased from time 1 to time 4. This lends credence to a bottom-up model in explaining the formation of specific constructs such as social representations (Huguet et al., 1998) and stereotypes (Schaller et al., 2002), or broader constructs such as culture itself (Bennett, 1998; Harton & Bourgeois, in press; Latané, 1996). That is, the same people whom we reciprocally influence on one issue we will likely reciprocally

influence on another, leading to the co-variance of such issues.

Consolidation and Continuing Diversity

DSIT (Latané, 1996) predicts global consolidation of attitudes and behaviors to occur as the number factor of social impact theory (Latané, 1981) allows for initial majorities to increase in size over time. On the other hand, DSIT also recognizes immediacy and clustering as limiting the influence of the majority and insulating some minorities from its dominion. This study did not find support for overall consolidation. Variance did not appear to decrease over time and in some cases it even increased. Furthermore, minority sizes tended to increase in size, although this did not reach conventional levels of significance. Global consolidation may take longer in a natural environment to manifest than the clustering and correlation predictions of DSIT. Prior research investigating consolidation either occurred in a laboratory setting (e.g., Latané & Bourgeois, 1996; Latané & L'Herrou, 1996) where there is more control over sources and amounts of influence or used computer simulations (e.g., Latané, 1996; Nowak et al., 1990) that condensed time. Future longitudinal research in a naturalistic social environment

may help to clarify whether global consolidation requires a longer time course than other outcomes predicted by DSIT.

Constraints on Dynamic Social Impact

The catastrophe theory of attitudes (CTA; Latané & Nowak, 1994) predicts that attitude change and stability will vary as a function of issue importance. I hypothesized that issues of moderately high importance would cluster, consolidate, and intercorrelate more over time than issues of low importance. However, high importance items did not statistically cluster more than low importance items, nor did high importance items consolidate more than low importance items. Instead, low importance items tended to become *more* diverse over time. The increase in diversity of opinion for low importance items may be due to their low rate of discussion. Attitudes change as a function of relevant thought (Harton & Latané, 1997a; Tesser, 1976; 1978), information (Harton & Latané, 1997a), and discussion (Harton & Latané, 2002). If discussion of low importance issues is non-existent, participants would be left to their own idiosyncratic thoughts and happen-stance information acquisition relevant to these items, thus leading each person to his or her own un-shared conclusions.

The only prediction of DSIT that issue importance did affect as expected was correlation. High importance items became more inter-related over time than did low importance items. One reason for this result may be that issues of moderately high importance were discussed more than issues of low importance ($M_s = 1.97$ and 1.83 , respectively), $t(673) = 8.512$, $p < .001$ (see Appendix W). The fact that issues discussed more intercorrelated more lends credence to the social-evolutionary argument that issues high in communicability will proliferate more than issues low in communicability (e.g., Schaller et al., 2002; Schaller & Latané, 1996). Although there seems to be a relationship between an issue's communicability and importance, future research is needed to better clarify this relationship.

It is not entirely clear why high importance items intercorrelated more than low importance issues but did not consolidate or cluster more. It could be a function of the different types of statistical analysis used for each. It could also be a chance finding. As such, the finding that higher importance issues intercorelate more over time should be taken tentatively. Future research is needed to better clarify the effect issue importance has on the predictions of DSIT (Latané, 1996).

Limitations

The results of the study may be attenuated by two factors. First, there was no control over the degree to which residents discussed the issues, or whether they discussed them at all. Overall, the frequency with which attitude items used were discussed was quite low. When participants were asked how often they discussed the attitude items at Times 2 and 3 using a 6 point Likert scale (1 = never, 6 = very often; see Appendixes O and P) the mean response for each item ranged from 1.19 to 3.12 (see Appendix W). Because social influence requires communication of some form to occur, the results are likely a weak display of the bottom-up phenomena. Secondly, a large portion (48%) of the participants were friends with at least some of their housemates before the beginning of the study. To the extent that such participants had a prior history of interaction, they would likely have reciprocally influenced one another and already be more alike in their attitudes and behaviors. This would then restrict the amount of change possible, and therefore attenuate the results.

Another limitation may be a response bias. Although the response rates are fairly high and representative of

the population of interest, there may be individual differences (e.g., social desirability) that lead some residents to be more likely to participate than others. And finally, the results may be less generalizable to men, given the greater number of women living on campus and participating in the study. For example, men may be less receptive to attitude disconfirming information than women and therefore less receptive to attitude change. Also, a number of the high importance items involved women's issues that may not be as personally relevant or meaningful for men.

Finally, the design of this study allowed for the investigation of individuals' attitudes and behaviors and the formation of social norms. However, this methodology may not be as useful in the study of some other dimensions of culture including but not restricted to material culture, ideologies, beliefs, and kin relationships.

Future Research

Future research may advance upon this study in four regards. First, by controlling the level of discussion of an issue and when the post discussion measure is given, future research may provide a more stringent test of DSIT (Latané, 1996). This is already the case for studies

conducted in the lab and in the classroom (e.g., Harton et al., 1998; Latané & Bourgeois, 1996). In a field setting, a planned intervention involving regularly scheduled discussion of some issue(s) may accomplish this end. Furthermore, social units of shared space (e.g., house) receiving the intervention may be compared to those not receiving the intervention. In a similar vein, more research is needed exploring the role of communicability on issues' and behaviors' ability to self-organize (Schaller, 2001; Schaller et al., 2002).

Secondly, future research is needed to better understand the relationship between issue importance and discussion. The present study tested issues of low and moderately high importance. CTA (Latané & Nowak, 1994) suggests that issues that are moderately important should be discussed more than issues of low importance. CTA also predicts that issues that are highly important would be more resistant to change. As such, future research would do well to use items representative of a wider range of importance levels to provide a more complete test of CTA.

Thirdly, future research may wish to only use first year students. Because such students are likely to have no prior history together, they should be less similar in

various attitudes and behaviors initially and therefore offer a greater opportunity for change over time. One means of studying individuals lacking any history together would be to restrict analysis of these data to first year students only. However, this would leave all influence from non first year students living with first year students as uncontrolled error variance. A more ideal means of studying social influence in individuals lacking any history together would be to repeat this study using freshmen only residence halls or houses where available.

Finally, future research may improve upon this study by measuring change over a longer period of time. Many of the cultures described and compared in top-down models have evolved over hundreds of years. Studies that have assessed clustering in dormitories at the end of a school year (e.g., Bourgeois & Bowen, 2001; Bowen & Bourgeois, 2001) obtained greater effect sizes, suggesting that influence continues to occur throughout the school year. Furthermore, it is unclear as to how lasting of an effect social influences have on people and a number of questions along this line remain. For example, would the trends seen in this study over an 11 week period persist, increase, or level off? Would the changes in attitudes and behaviors

illustrated in this study persist after residents move out of their house? Moreover, what role does the selection of environments play in social influence (Newcomb et al., 1967)?

Implications

Theoretical

Despite the limitations, the study lends support to DSIT and a bottom-up model of culture. The clustering, correlation, and continuing diversity predictions of DSIT were supported. Consistent with prior research, participants interacted most with those closest to them (e.g., Latané et al., 1995) and became more similar to them as a result. Furthermore, these same groups that interacted and influenced one another on one issue also influenced each other on other issues, resulting in an increased association between attitudes and behaviors. These same mechanisms that led people to interact with and become more similar to those nearest them also protected total consolidation or conformity on any attitudes or behaviors measured. However, support for consolidation was not found. As suggested earlier, overall consolidation may require more time and discussion to occur in a natural setting than the other predictions of DSIT.

With regard to combining DSIT and CTA, issue importance levels did not have as strong of an effect as I hypothesized. Issue importance only significantly impacted the degree of correlation. It may be that the issues used in the study were not sufficiently different in importance and/or discussion for the predicted differences to emerge. It is also possible that the different types of attitude change predicted by CTA (Latané & Nowak, 1994) may have more complex effects on group-level self-organization than anticipated. The hypotheses regarding importance were created based on a qualitative combination of the postulates of DSIT and CTA. However, quantitative combinations of the theories (e.g., using computer simulations to model the joint assumptions of DSIT and CTA) might reveal different predicted outcomes.

Methodological

This study combined an online survey approach with a longitudinal design. This method is an improvement over conventional descriptive and comparative methods for investigating culture in that it allows researchers to track a large number of a population over time, offering a more complete and in-depth level of analysis. Furthermore, the use of online surveys may have reduced attrition and

helped to make this study more representative of the population of interest than previous field tests (e.g., Bourgeois & Bowen, 2001; Bowen & Bourgeois, 2001).

The methodology used in this study also allows for a more complete test of DSIT. Much of the previous research on DSIT either stems from computer simulations (e.g., Latané, Nowak, & Liu, 1994; Nowak, Szamrej, & Latané, 1990) or occurred in the lab (e.g., Latané & Bourgeois, 1996). These tests, although affirming DSIT, are low in external validity. The two previous field tests of DSIT (Bourgeois & Bowen, 2001; Bowen & Bourgeois, 2001) only surveyed participants once and were unable to test for consolidation or other changes over time.

Applied

The results of the study could lay the groundwork for future social engineering projects. By shedding light on how social norms and culture form, proliferate, and change over time, this study may help us to better understand the complex dynamics of social interaction, which may be applied toward living assignments, intervention programs, and shaping public policy (Latané & Nida, 1980). Moreover, this information may lead to intervention techniques that more fully take into account the psychosocial phenomena of

social influence in at risk populations (Gladwell, 2000; Newman, 1976). More directly, the study may offer suggestions to hall coordinators on how to assign students to living spaces so as to promote healthy attitudes and behaviors and limit unhealthy ones.

Conclusion

Top-down models of culture provide a useful although limited understanding of cultural content, formation, and change. Previous theorizing using bottom-up models helps to explain why cultures exist and explain some of their content. Dynamic social impact theory expands on previous bottom-up models by proposing a concise mechanism for cultural content transmission and the dynamic outcome of this process. Furthermore, the catastrophe theory of attitudes suggests that the level of involvement of an issue will modify attitude change and therefore modify DSIT's predictions.

This study supported three of the four predictions of DSIT in a field setting and suggests that issue involvement may function to constrain or encourage the self-organization of opinions. Participants interacted most with those closest to them. As a result, participants who lived together became more similar in their attitudes and behaviors. In turn, those attitudes and behaviors became more related to each

other as the same people who influenced one another on one issue also influenced one another on other issues.

Furthermore, the relationship between attitudinal responses increased more when the items were personally involving for participants than when they were not.

This study offers support of DSIT, as a bottom-up account for how cultures acquire their content, form, and change. It suggests that social norms may develop from the self-organization of individuals' attitudes and behaviors via a process of localized social influence. This line of research may help us to better understand other components of culture including language, ideology, and practices, which may evolve in much the same way.

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APPENDIX A
PILOT STUDY QUESTIONNAIRE

Demographics

Age: ____

Gender: ____

Ethnicity (please select one): ____ Caucasian
 ____ African American
 ____ American Indian
 ____ Asian or Pacific Islander
 ____ Hispanic
 ____ Multiracial
 ____ Other: Please specify_____

Region (please select one): ____ In state
 ____ Out of state (please specify) _____
 ____ International (please specify)_____

Class (please select one): ____ Freshmen
 ____ Sophomore
 ____ Junior
 ____ Senior
 ____ Graduate
 ____ Other: Please specify_____

Major: _____

Have you ever lived in the dorms? ____

Do you currently live on campus: ____

If yes, what building? _____

Religion (please select one): ____ Don't Know
 ____ Don't Care
 ____ Nondenominational
 ____ Catholic
 ____ Protestant
 ____ Buddhist
 ____ Hindu
 ____ Muslim
 ____ Mormon
 ____ Jehovah's Witness
 ____ Other: please specify_____

College GPA: _____

For the following items, please indicate; first, your level of AGREEMENT with each item, and secondly how IMPORTANT each is to you.

Rate your level of agreement using the following scale.

| | | | | | | |
|----------------------|---|----------------------|---|-------------------|---|-------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly Disagree | | Somewhat Disagree | | Somewhat Agree | | Strongly Agree |

Rate the level of importance of each issue using the following scale.

| | | | | | | |
|-----------------------|---|-----------------------|---|-----------|---|-------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Not very Important | | Somewhat Important | | Important | | Very Important |

EXAMPLE:

Agreement

Importance

I like pepperoni on my pizza.

5

1

I participate in Intramural sports.

I participate in Fraternity/Sorority activities.

I participate in my House/Hall activities.

I participate in college athletics.

I participate in Theater.

I participate in Orchestra.

I participate in Choir.

I exercise regularly.

I attend UNI sporting events.

I attend UNI Theater performances.

I attend UNI Orchestra performances.

I attend UNI Choir Performances.

I usually wake up early in the morning.

I usually go to bed late at night.

I usually sleep 8 hours each night.

I drink alcohol regularly.

I only drink socially.

I sometimes drink alone.

| | <u>Agreement</u> | <u>Importance</u> |
|---|------------------|-------------------|
| I drink caffeinated beverages regularly. | _____ | _____ |
| I smoke regularly. | _____ | _____ |
| I only smoke socially. | _____ | _____ |
| I attend church regularly. | _____ | _____ |
| I sometimes smoke alone. | _____ | _____ |
| I smoke Pot regularly. | _____ | _____ |
| I use ecstasy regularly. | _____ | _____ |
| I seldom skip class. | _____ | _____ |
| I often get good grades in school. | _____ | _____ |
| I like to meet new people. | _____ | _____ |
| I seek help with school outside of class. | _____ | _____ |
| My roommate and I are close friends. | _____ | _____ |
| Many of my close friends live in my house. | _____ | _____ |
| Many of my close friends live in my hall. | _____ | _____ |
| I go home often on the weekends. | _____ | _____ |
| I feel safe on campus. | _____ | _____ |
| The food in the dinning halls is good. | _____ | _____ |
| The food in the union is good. | _____ | _____ |
| I like fast food. | _____ | _____ |
| I like the local restaurants. | _____ | _____ |
| I like the local music stations. | _____ | _____ |
| I like to wear designer clothes. | _____ | _____ |
| I like to wear popular name brand clothes. | _____ | _____ |
| I like to party. | _____ | _____ |
| I regularly rent movies. | _____ | _____ |
| I often go to the movies. | _____ | _____ |
| I often attend the local dance clubs. | _____ | _____ |
| I am religious. | _____ | _____ |
| Having sex before marriage is okay. | _____ | _____ |
| Having sex with a stranger is okay. | _____ | _____ |
| I skip class at least once a week. | _____ | _____ |
| I seek help from professors outside of class. | _____ | _____ |
| I study 5 hours a week or more. | _____ | _____ |

| | <u>Agreement</u> | <u>Importance</u> |
|--|------------------|-------------------|
| I earn good grades in my classes. | _____ | _____ |
| I play football or other sports on occasion. | _____ | _____ |
| I eat 5 servings of fruit/vegetables a day. | _____ | _____ |

How do you feel about these people/issues? Please rate your attitudes using this scale:

| | | | | | | |
|------------------|---|---|---|---|---|----------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Very unfavorable | | | | | | Very favorable |

How important are each of these people/issues to you? Please indicate by using the following scale.

| | | | | | | |
|-----------------------|-----------------------|---|---|-----------|---|-------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Not very Important | Somewhat Important | | | Important | | Very Important |

| A | I | |
|-------|-------|---|
| _____ | _____ | 1. Legalizing marijuana |
| _____ | _____ | 2. Rush Limbaugh |
| _____ | _____ | 3. Increasing military spending |
| _____ | _____ | 4. School vouchers |
| _____ | _____ | 5. Conservatives |
| _____ | _____ | 6. Governor Vilsack |
| _____ | _____ | 7. The use of pesticides on campus |
| _____ | _____ | 8. Democrats |
| _____ | _____ | 9. Drilling for oil in protected Alaskan wilderness |
| _____ | _____ | 10. Dr. Laura |
| _____ | _____ | 11. Al Gore |
| _____ | _____ | 12. Government-sponsored health care |
| _____ | _____ | 13. George W. Bush |
| _____ | _____ | 14. Liberals |
| _____ | _____ | 15. RU 486 (the "abortion pill") |
| _____ | _____ | 16. Public Safety having guns |
| _____ | _____ | 17. The ACLU |
| _____ | _____ | 18. Military intervention in Yugoslavia |
| _____ | _____ | 19. Gay marriages |

| A | I | |
|-------|-------|--|
| _____ | _____ | 20. Senator Grassley |
| _____ | _____ | 21. Abortion |
| _____ | _____ | 22. Republicans |
| _____ | _____ | 23. Genetically modified foods |
| _____ | _____ | 24. Feminists |
| _____ | _____ | 25. The death penalty |
| _____ | _____ | 26. Gays in the military |
| _____ | _____ | 27. Women working when their children are very young |
| _____ | _____ | 28. Euthanasia |
| _____ | _____ | 29. Making English the official language of Iowa |
| _____ | _____ | 30. Lowering the drinking age to 19 |

For the following items, please indicate:

1) what your **ATTITUDE** is on the issue (in the right column) by using this scale:

| | | | | | | |
|------------------------------|----------|------------------------------|----------|---------------------------|----------|---------------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly Disagree | | Somewhat Disagree | | Somewhat Agree | | Strongly Agree |

2) how **IMPORTANT** you think the item is (in the left column) by using the following scale:

| | | | | | | |
|-------------------------------|----------|-------------------------------|----------|------------------|----------|---------------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Not very Important | | Somewhat Important | | Important | | Very Important |

| A | I | |
|-------|-------|---|
| _____ | _____ | UNI shouldn't raise tuition to cover the state budget cuts. |
| _____ | _____ | Men and women should share the expenses of birth control. |
| _____ | _____ | It is a good idea to automatically charge students a set fee each year for an all-activities pass so they can get into sporting events. |

A I

- _____ _____ The bars on the hill do not enforce underage drinking laws.
- _____ _____ There should be more seats in classes or more classes/professors so that classes aren't so hard to get into.
- _____ _____ People do not choose to be homosexual.
- _____ _____ All campus jobs should be open to all students regardless of financial need.
- _____ _____ UNI students should get in free to athletic events
- _____ _____ People on welfare are lazy and should just get a job like the rest of us.
- _____ _____ The age-19 bars in Cedar Falls should change their policy so that all is needed for admittance is a UNI ID card.
- _____ _____ Professors should take a salary cut to cover the budget-cuts.
- _____ _____ UNI should come up with various ways to make the campus safer (more campus phones, better lighting, etc).
- _____ _____ Fines for littering should be enforced
- _____ _____ Rollerblading should be banned from university grounds.
- _____ _____ Women never invite sexual harassment.
- _____ _____ Dogs are much better pets than cats.
- _____ _____ Dining centers should offer more choices in hot meals for vegetarians.
- _____ _____ Quiet hours in the dorms should be extended until 2am on the weekends.
- _____ _____ UNI needs more racial diversity on its campus.
- _____ _____ The government is withholding information from the public on extra-terrestrial life forms.
- _____ _____ There should be more computer labs on campus.
- _____ _____ Scientists really have a cure for AIDS but are not telling us.
- _____ _____ Professors should not be allowed to give students any homework or tests the week before finals.
- _____ _____ The university should close when a water main breaks.

A I

-
- _____ Affirmative Action should be abolished.
- _____ UNI should close a full week for Thanksgiving break.
- _____ Cloning another human being is completely unethical.
- _____ Abortion ends the life of a human being.
- _____ Research on the cloning of humans is a waste of time.
- _____ Illegal immigrants are taking jobs away from hard-working native-born Iowans.
- _____ The national health problem of HIV should be discussed in schools starting in kindergarten.
- _____ Pornography on the Internet needs to be completely banned.
- _____ Everyone who does not exercise should be considered lazy
- _____ Television/film companies should prohibit cartoon violence.
- _____ The government should crack down on illegal immigrants coming into our state.
- _____ The death penalty should be reinstated in Iowa.
- _____ There should be mandatory marriage counseling before divorce is granted.
- _____ Money is the answer to all problems.
- _____ Women in combat should have to take birth control pills.

APPENDIX B
INFORMED CONSENT

You are invited to participate in a research project conducted through the University of Northern Iowa. The University requires that you give your signed agreement to participate in this project. The following information is provided to help you make an informed decision about whether or not to participate.

The purpose of this study is to investigate the attitudes of students living in the dorms and to find out what issues are important to you and how those are related to who you interact with. We will conduct four web-based surveys over the course of the semester. Each survey will take about 15-20 minutes to complete. If you choose to participate, we will contact you by email with the URL. You are under no obligation to complete the later surveys should you choose to participate in the first one. However, you will be entered into a sweepstakes once for every survey you complete. Prizes will include free products gift certificates, movie passes, coupons, etc., from local businesses (approximate value of products will range from \$3 to \$100).

Some of the questions involve your attitudes toward potentially embarrassing issues (e.g., alcohol use and sexual attitudes). To protect your privacy, we ask that you identify yourself using the last 4 digits of your social security number, followed by your birth month and day. For example, if your birthday is March 5th, then your ID # would be XXXX0305. The researcher and faculty advisor are the only people who will have access to your dorm address and e-mail address, and these will never be released to any other parties and will not be associated with your responses to the survey.

Information from this study may help residence coordinators to better match students in the dorms and organize dorm activities. In addition, these data will be used in a master's thesis and will also be published in scientific journals. Generally, your participation will help us to better understand college students' attitudes, to evaluate campus programs, and to make the campus a better place for students to live.

I understand that my participation is completely voluntary. I have been advised that I am free to withdraw from participation at any time or to choose not to participate at all, and that by doing so I will not be penalized or lose benefits to which I am otherwise entitled. I understand that the investigators will answer any questions I have about my participation. I also understand that if I desire information in the future regarding my participation or the study in general, I can contact Jerry Cullum via email at jcullu78@uni.edu or his faculty advisor Helen Harton at the Department of Psychology, University of Northern Iowa, 319-273-2235. I can also contact the office of the Human Participants Coordinator, University of Northern Iowa, at 319-273-2748, for answers to questions about rights of research participants and the participant review process.

I understand the nature and extent of my participation in this project as stated above and the possible risks arising from it. I hereby agree to participate in this project. I acknowledge that I have received a copy of this consent statement and that I am at least 18 years of age or otherwise eligible to participate in this study.

(Signature of participant)

(Date)

(Printed name of participant)

(Signature of investigator)

(Date)

(Signature of advisor)

(Date)

APPENDIX C
DEMOGRAPHICS

Age: ____

Gender: ____

Ethnicity (please select one): ___ Caucasian
 ___ African American
 ___ American Indian
 ___ Asian or Pacific Islander
 ___ Hispanic
 ___ Multiracial
 ___ Other

Region (please select one): ___ In state ___ Out of state (please specify)

 ___ International (please specify) _____

Zip code of your hometown: _____

Class (please select one): ___ Freshman
 ___ Sophomore
 ___ Junior
 ___ Senior
 ___ Graduate
 ___ Other: Please specify _____

Major: _____

Dorm address: Hall _____ House _____ Room
 Number _____

Did you live in the dorms last year? (Select one):
 ___ No, this is my first year at UNI.
 ___ No, I was at UNI last year but lived off campus.
 ___ Yes, I lived in same room last year.
 ___ Yes, but I lived in a different room.

Last 4 digits of social security number: ___ ___ ___ ___

Birth month and day (ex. March 5th = 0305): ___ ___ ___ ___

Email address (We will only use this address to notify you when surveys are ready and if you are a sweepstakes winner): _____

Your Initials (Please print): ___ ___

APPENDIX D

HOUSE MEETING SOLICITATION PROTOCOL

YOU WILL NEED: 50 ENVELOPES FOR EACH HOUSE. ENVELOPES SHOULD INCLUDE 2 COPIES OF CONSENT FORMS, AND A DEMOGRAPHICS SHEET. Also enough pencils.

PASS OUT THE ENVELOPES TO THE STUDENTS

SAY THE FOLLOWING: Hi, my name is _____. First, I want to thank you and your RA for letting me take a few minutes during this meeting to come talk to you.

A team of researchers in the psych dept. is conducting a study investigating the development of college students' attitudes and behaviors over time, and your house has been chosen as one of those invited to participate. The study has been approved by the University's Human Participants Review Board and the Dept. of Residence.

Participation involves completing four web-based surveys over the course of the semester. Each one will take about 15 minutes or less, and you can complete them at your convenience. The surveys will ask you questions about your attitudes on political, social, and campus issues and about your behaviors, such as how often you exercise or eat fruits and vegetables. You'll be notified of the surveys via e-mail.

So why should you participate? First, the information you provide will help us learn about attitudes and behaviors of college students; you can feel good about your contribution to science. Second, these data will help us evaluate some campus programs such as the SAVE violence prevention program. Better programs will lead to a better, safer campus that we will all benefit from. Third, as a more direct incentive, we want to reward you for your time by giving you a chance to win prizes, such as gift certificates from local businesses, each time you participate. We have over \$2000 worth of prizes (ex: four \$50 gift cert. from CD Warehouse, others from Hy-Vee, movie theaters, restaurants, etc.), and if you participate in all four surveys, you will have a better than 1 in 10 chance of winning something!

All the data you provide will be completely confidential. Your surveys will be recorded with a code number based on the last four digits of your social security number and your date of birth. Your dorm and e-mail address will only be used to contact you about the surveys and if you win a prize. This information will be stored separately from your survey responses and never used to identify you personally. Only the project coordinator and his advisor will have access to this information, and it will be destroyed at the end of the study.

Signing up today doesn't obligate you to complete the study. We hope that you will complete all four surveys, however, as the more responses we get, the better

our data and conclusions will be. We will post the results on a website when the study is finished so that you can see what we found.

Now if you'll open the envelopes, you'll see three sheets. The blue sheet is yours to keep and gives you some more information on the study and how to contact the project coordinator if you have any questions. Your RA also has contact information on the project, and the web address we will send you next week with the survey link will have more information as well. If you are willing to participate, sign the white form and complete the demographics sheet and return those to the front in the envelope.

COLLECT ENVELOPES AND THANK THEM FOR THEIR TIME. IF YOU GET QUESTIONS, LET THEM KNOW THAT YOU'RE SORRY YOU CAN'T ANSWER THEM AT THE MOMENT B/C YOU PROMISED THE RAS YOU'D BE DONE IN ABOUT 5 MIN, BUT THEY CAN CALL/E-MAIL PEOPLE ON THE BLUE SHEET.

APPENDIX E
CONTRIBUTORS LINK

Sweepstakes Prizes

Remember that when you complete each survey, you are entered into a sweepstakes to win prizes donated by area businesses (value of \$3 to \$100 each). If you complete all four surveys, you'll have better than a 1 in 10 chance of winning! All prizes will be given out at the end of the study (December/January). We currently have over \$2000 worth of prizes to give away!

We want to thank our donors for their generous support of this project.

Local businesses that contributed items for the sweepstakes include:

- CD's & More
- SamGoody
- Hy-Vee
- Kohl's Dept. Store
- Beck's Pub & Grille
- The Brown Bottle (Cedar Falls)
- AppleBee's Neighborhood Grill & Bar
- Doughy Joey's Peetza Joynt
- Blue Moon Cafe
- The Other Place (O.P.)
- Carlos O'Kelly's
- Panera Bread
- Burger King (College Square Mall)
- Texas Roadhouse
- Hot Topic (College Square Mall)
- Spencer Gifts
- American Eagle Outfitters
- City Looks Salon
- Wal-Mart
- College Square Mall

There's also a \$100 cash prize contributed by the Dorm Study Research Team!

APPENDIX F

DORM STUDY PROMOTIONAL AD

A small gift from the Dorm Study

We hope that you'll help us out by completing the Dorm Study surveys, but either way, enjoy the candy! You'll get an email in the next few days letting you know when the first survey is ready.

<http://www.csbs.uni.edu/dormstudy/>

APPENDIX G

ADVERTISEMENT FOR SURVEY 1 AND 2

KILL SOME TIME

WIN SOME PRIZES

TAKE THE DORM
STUDY SURVEY

<http://www.csbs.uni.edu/dormstudy/>

APPENDIX H
ADVERTISEMENT FOR SURVERY 3

\$100 CASH

OVER \$2,000 IN PRIZES

**NEW AND IMPROVED
DORM STUDY SURVEY 3.0**

<http://www.csbs.uni.edu/dormstudy/>

APPENDIX I

ADVERTISEMENT FOR SURVEY 4

**LAST CHANCE
TO
WIN**

**TAKE
THE FINAL SURVEY**

<http://www.csbs.uni.edu/dormstudy/>

APPENDIX J
EMAIL SOLICITATIONS FOR SURVEY 1

From: jcullu78@uni.edu
To: Dorm-Study@uni.edu
Date: Sat, 31 Aug 2002 16:59:25 -0600 (CDT)
Subject: DORM STUDY SURVEY!

The first web survey is ready! So take a study break and check it out at

<http://www.csbs.uni.edu/dormstudy/>

It should take about 10-15 minutes to complete. We ask that you take it when you are alone, since we want to know what you think, not what your friends think. You can take it any time and anywhere, but we'd appreciate it if you could complete it in the next few days, by September 7 at the latest.

If you didn't complete the forms on the study at your house meeting, just choose the second link to get to the survey--no problem.

When you are done, you will be entered into the sweepstakes to win one of over \$2000 worth of prizes! Contact Jerry Cullum (Project Coordinator) at this email address if you have any questions.

Thanks for your help!

The Dorm Study Research Team

Jerry
Helen
Nick
Courtney
Kathy
Chad
James

You have received this message because you are eligible to participate in the dorm study as a resident of Lawther, Hagemann, Rider, or Shull. We will only use this mailing list to notify you when the surveys are ready. If you would like to remove yourself from this list, send a message to mailserv@uni.edu where the body of that message contains the single line: unsub dorm-study. If you would like to add yourself to the list using a different email address, send a message from that

account to mailserv@uni.edu with the body:
sub dorm-study

From: jcullu78@uni.edu
To: dorm-study@uni.edu
Date: Sun, 08 Sep 2002 22:35:31 -0600 (CDT)
Subject: Thanks!

We want to take this opportunity to thank you for completing our first survey and for your helpful comments. IF YOU HAVE NOT YET COMPLETED THE SURVEY, YOU STILL HAVE AN OPPORTUNITY TO PARTICIPATE AND BE ENTERED FOR PRIZES. The survey will remain available at <http://www.csbs.uni.edu/dormstudy/> a couple more days.

We have also received some more prizes to add to the sweepstakes from American Eagle Outfitters and Wal-Mart. Look for our next survey in October.

Sincerely,

The Dorm Study Research Team
Jerry
Helen
Nick
Courtney
Kathy
Chad
James

APPENDIX K
EMAIL SOLICITATIONS FOR SURVEY 2

From: jcullu78@uni.edu
To: Dorm-Study@uni.edu
Date: Sat, 28 Sep 2002 09:35:46 -0600 (CDT)
Subject: DORM STUDY SURVEY 2!

The SECOND web survey is ready! So take a study break and check it out at

<http://www.csbs.uni.edu/dormstudy/>

Taking this survey will give you another chance to win one of over \$2,000 worth of prizes donated from local businesses. On top of this, we are going to give some lucky student \$100 in cash out of our own pockets, just for taking the time to fill out one of our surveys. (Your participation is that important to us.)

We've used your comments on the first survey to improve the format and instructions on this one. Also in response to your comments, we added a section on the homepage that explains more about the study, why it's important, and how it relates to you!

You can take the second survey anytime and anywhere, but we'd appreciate it if you could complete it in the next few days, by OCTOBER 5th at the latest.

If you just found out about the Dorm Study and didn't take the first survey, just choose the second link to get to the survey--no problem.

Contact Jerry Cullum (Project Coordinator) at this email address if you have any questions.

We really appreciate your help!
The Dorm Study Research Team

Jerry
Helen
Nick
Courtney
Kathy
Chad
James

You have received this message because you are eligible to participate in the dorm study as a resident of Lawther, Hagemann, Rider, or Shull. We will only use this mailing list to notify you when the surveys are ready. If you would like to remove yourself from this list, send a message to mailserv@uni.edu where the body of that message contains the single line: unsub dorm-study. If you would like to add yourself to the list using a different e-mail address, send a message from that account to mailserv@uni.edu with the body: sub dorm-study

From: jcullu78@uni.edu
To: Dorm-Study@uni.edu
Date: Sun, 06 Oct 2002 14:00:12 -0600 (CDT)
Subject: THANKS!

We want to take this opportunity to thank you for completing our second survey and for your helpful comments. IF YOU HAVE NOT YET COMPLETED THE SURVEY, YOU STILL HAVE AN OPPORTUNITY TO PARTICIPATE AND BE ENTERED FOR PRIZES. The survey will remain available at:

<http://www.csbs.uni.edu/dormstudy/> for a couple more days.

The drawing for all sweepstakes prizes, including the \$100 cash prize, will be in December, at the end of the study. Each survey you complete will earn you one entry in the drawing.

Sincerely,

The Dorm Study Research Team
Jerry
Helen
Nick
Courtney
Kathy
Chad
James

APPENDIX L

EMAIL SOLICITATIONS FOR SURVEY 3

From: jcullu78@uni.edu
To: Dorm-Study@uni.edu
Date: Fri, 25 Oct 2002 10:55:55 -0600 (CDT)
Subject: DORM STUDY SURVEY 3!

The Third web survey is ready! So take a study break and check it out at

<http://www.csbs.uni.edu/dormstudy/>

Taking this survey will give you another chance to win one of over \$2,000 worth of prizes donated from local businesses, like College Square Mall, our most recent contributor. On top of this, we are going to give some lucky student \$100 in cash out of our own pockets, just for taking the time to fill out one of our surveys. (Your participation is that important to us.) All Sweepstakes prizes (including the \$100 cash) will be awarded after Thanksgiving Break.

We've used your comments on BOTH surveys to improve the format and instructions on this one. Also in response to your comments, we added a section on the homepage that explains more about the study, why it's important, and how it relates to you!

You can take the Third survey anytime and anywhere, but you should respond by MIDNIGHT, SATURDAY NOVEMBER 2ND in order to receive an entry in the sweepstakes.

If you just found out about the Dorm Study and didn't take the first or second survey, just choose the second link to get to the survey--no problem.

Contact Jerry Cullum (Project Coordinator) at this email address if you have any questions.

We really appreciate your help!
The Dorm Study Research Team

Jerry
Helen
Nick
Courtney
Kathy
Chad
James

You have received this message because you are eligible to participate in the dorm study as a resident of Lawther, Hagemann, Rider, or Shull. We will only use this mailing list to notify you when the surveys are ready. If you would like to remove yourself from this list, send a message to mailserv@uni.edu where the body of that message contains the single line: unsub dorm-study. If you would like to add yourself to the

list using a different e- mail address, send a message from that account to mailserv@uni.edu with the body: sub dorm- study

From: jcullu78@uni.edu
To: Dorm-Study@uni.edu
Date: Fri, 01 Nov 2002 16:04:14 -0600 (CDT)
Subject: THANKS!

We want to take this opportunity to thank you for completing our third survey and for your helpful comments. IF YOU HAVE NOT YET COMPLETED THE SURVEY, YOU STILL HAVE AN OPPORTUNITY TO PARTICIPATE AND BE ENTERED FOR PRIZES. The survey will remain available at

<http://www.csbs.uni.edu/dormstudy/> through Monday, Nov. 4th.

And be on the look out for the final survey, about one week before Thanksgiving break!

Sincerely,

The Dorm Study Research Team

Jerry

Helen

Nick

Courtney

Kathy

Chad

James

APPENDIX M
EMAIL SOLICITATIONS FOR SURVEY 4

From: jcullu78@uni.edu
To: Dorm-Study@uni.edu
Date: Sat, 16 Nov 2002 08:57:34 -0600 (CDT)
Subject: LAST CHANCE FOR DORM STUDY

The LAST web survey is ready! So take a study break and check it out at
<http://www.csbs.uni.edu/dormstudy/>

TO BE ENTERED IN THE SWEEPSTAKES YOU MUST RESPOND BY WEDNSDAY
NOVEMBER 27th (BEFORE THANKSGIVING).

Taking this survey will give you another chance to win one of over \$2,000 worth of prizes donated from local businesses. On top of this, we are going to give some lucky student \$100 in cash out of our own pockets, just for taking the time to fill out one of our surveys. (Your participation is that important to us.) All Sweepstakes prizes (including the \$100 cash) will be awarded in December.

Contact Jerry Cullum (Project Coordinator) at this email address if you have any questions.

We really appreciate your help!
The Dorm Study Research Team
Jerry
Helen
Nick
Courtney
Kathy
Chad
James

You have received this message because you are eligible to participate in the dorm study as a resident of Lawther, Hagemann, Rider, or Shull. We will only use this mailing list to notify you when the surveys are ready. If you would like to remove yourself from this list, send a message to mailserv@uni.edu where the body of that message contains the single line: unsub dorm-study. If you would like to add yourself to the list using a different e-mail address, send a message from that account to mailserv@uni.edu with the body: sub dorm- study

From: jcullu78@uni.edu
To: Dorm-Study@uni.edu
Date: Thu, 21 Nov 2002 17:10:30 -0600 (CDT)
Subject: DORM STUDY REMINDER

You still have an opportunity to voice your opinion by taking the last survey. It only takes about 10 minutes to complete and will be available until Wed., Nov 27th. This is also your last chance to be entered in the sweepstakes. All prizes will be distributed in December.

We realize that this is a very busy time of the semester for students. We appreciate all your help this semester and wish you well in your studies.

Sincerely,

The Dorm Study Research Team
Jerry
Helen
Nick
Courtney
Kathy
Chad
James

APPENDIX N

SURVEY 1

Dorm Study Survey Page 1

This survey should take about 10-15 minutes. Please complete it when you are alone and not distracted, so that you can be as honest and accurate as possible. All your responses are completely confidential.

There are five parts to the survey. Each will be displayed on a different web page.

Use the mouse or the tab key to move from item to item. Do NOT use the enter key, as this will close the page.

Part 1: Background information:

What is your code number? Your code number is the last four digits of your social security number, followed by your birth month and date. Ex: if your SSN is 325-24-5235 and your birthdate is March 7, your number would be 52350307. It is really important that you accurately enter this number so we can link your responses to the four surveys and so you can win prizes.

Code number (last 4 SSN + 2 digit birth month + 2 digit birth day):

Have you moved from the dorm room you were assigned at the beginning of the semester?

Yes No

If yes, please type your new address below:

Room: House: Hall:

Which of the Students Against a Violent Environment (SAVE) programs/trainings have you attended this semester?

SAVE Forum Theatre (e.g., Voices Against Violence New Student Presentation)

- SAVE Frontline training
- SAVE Advocacy training
- Mentors in Violence Prevention (MVP) program
- None of the above

Were you friends with your roommate before this semester began?

- Yes No

Were you friends with anyone in your house besides your roommate before this semester began?

- Yes No

Please check to make sure you answered all the items. When you are done, click on the continue button to go to the next page.

Continue (Page 1 of 5)

Dorm Study Survey Page 2

Part 2: Attitudes:

Please indicate how much you agree or disagree with each of the following statements by using the scale provided.

| | | | | | | |
|----------------------|----|----|----|----|----|-------------------|
| Strongly Disagree | | | | | | Strongly Agree |
| -3 | -2 | -1 | +1 | +2 | +3 | |

| | | | | | | |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| It is safe for a woman to walk alone on campus at night. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| The U.S. should use military force in Iraq. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Women should not work when their children are very young. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| The English only laws in Iowa are a good idea. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| A man should never have sex with a woman who is drunk. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| It is a good idea to automatically charge students a set fee each year for an all-activities pass so they can get into campus events. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Please check to make sure you answered all the items. When you are done, click on the continue button to go to the next page.

Continue (Page 2 of 5)

Dorm Study Survey Page 3

Part 3: Activities

In the last month, how often did you:

Exercise?

Smoke cigarettes?

Drink alcoholic beverages?

Eat at least 5 servings of fruits and vegetables per day?

In the last month, how many alcoholic beverages (e.g., cans of beer, glasses of wine) did you usually consume on any given occasion?

In the last month, under what circumstances did you smoke? Check all that apply.

- None
- When alone
- When with friends
- When with family
- At a party
- At a club or bar
- Between classes
- Other

In the last month, under what circumstances did you drink alcohol? Check all that apply.

- None
- When alone
- When with friends
- When with family
- At a party
- At a club or bar
- Between classes
- Other

What time do you usually get out of bed in the morning? :

What time do you usually go to bed at night? :

How much do you keep up with the news and current events?

Not at all Very much

What are your favorite TV shows? List up to three, with your most favorite first.

| | | |
|--|--|--|
| | | |
|--|--|--|

Answer the questions below from -3 (strongly disagree) to +3 (strongly agree).

| | Strongly Disagree | | | | | Strongly Agree |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | -3 | -2 | -1 | +1 | +2 | +3 |
| I intend to take an active role in recycling within the dorms. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| My parents encourage recycling. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Recycling is too much of a hassle to bother with in the dorms. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| My boyfriend/girlfriend feels that recycling is important. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Even if all the college students in the dorms recycled, it wouldn't really help solve any environmental problems. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Without dorm facilities, recycling in the dorms will fail. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| My friends think I should recycle. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I would take advantage of recycling programs available to me in the dorms. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I would support an additional per semester fee for all students (like the current computer fee) to go toward recycling programs on campus. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Please check to make sure you answered all the items. When you are done, click on the continue button to go to the next page.

| | | | | | | |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| If I heard a woman yelling or screaming in another dorm room, I wouldn't know what I could do. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Women tend to exaggerate how much rape affects them. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Illegal immigrants are taking jobs away from hard-working native-born Iowans. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| It is a good idea to automatically charge students a set fee each year for an all-activities pass so they can get into campus events. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| It's a bad idea to join a fraternity/sorority. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Abortion should be freely available on demand. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| It is safe for a woman to walk alone on campus at night. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| It's okay to have sex with someone you just met. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| A man should never have sex with a woman who is drunk. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| The English only laws in Iowa are a good idea. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Women should not work when their children are very young. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| The U.S. should use military force in Iraq. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Please check to make sure you answered all the items. When you are done, click on the continue button to go to the next page.

Continue (Page 4 of 5)

Dorm Study Survey Page 5

Part 5: Feeling thermometers and miscellaneous:

How warm or cold do you feel toward each of these groups or persons? Indicate by typing in a number from 0 (very cold) to 100 (very warm) to the right of each item. If you have no idea who a person is, put an "X" in that blank.

| | | | | | |
|--------------------|----------------------|----------------------|----------------------|----------------|----------------------|
| Atheists | <input type="text"/> | Governor Tom Vilsack | <input type="text"/> | Doug Gross | <input type="text"/> |
| Muslims | <input type="text"/> | Christians | <input type="text"/> | George W. Bush | <input type="text"/> |
| Mexican immigrants | <input type="text"/> | African-Americans | <input type="text"/> | Arabs | <input type="text"/> |

Answer the next set of questions on a scale from "never" to "always."

| | Never | | | | Always |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|--------------------------|
| When I witness a man "hitting on a woman" or trying to "pick up" a woman and I know she doesn't want it, I intervene. | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| When I witness a situation in which it looks like a woman will end up being taken advantage of sexually, I intervene. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| When I hear a sexist comment, I indicate my displeasure. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

How honest do you think you were able to be on this survey?

Not at all honest Completely honest

Do you have any comments you would like to make about the survey, your responses, or the study in general?



Please check to make sure you answered all the items. When you are done, click on the submit button to submit your survey.

[Submit \(Page 5 of 5\)](#)

APPENDIX O

SURVEY 2

Dorm Study Survey Page 1

This survey should take about 10-15 minutes. Please complete it when you are alone and not distracted, so that you can be as honest and accurate as possible. All your responses are completely confidential.

Because we are interested in how attitudes and behaviors may change over time or be different at different times of the year, some of the items on this survey will be similar to those you completed on the previous survey. Other questions, however, will be new. Because this study encompasses several research projects, there will be several types of questions on each survey. After you've submitted your survey today, there will be a place where you can link to more information about some of these projects from the dorm study homepage.

There are five parts to the survey. Each will be displayed on a different web page.

Part 1: Background information

What is your code number? Your code number is the last four digits of your social security number, followed by your birth month and date. Ex: if your SSN is 325-24-5235 and your birth date is March 7, your number would be 52350307. It is really important that you accurately enter this number so we can link your responses to the four surveys and so you can win prizes.

Code number (last 4 SSN + 2 digit birth month + 2 digit birth day):

Have you moved from the dorm room you were in when you completed the last survey (early September)?

Yes No

If yes, please type your new address below:

Room: House: Hall:

Part 2: Activities

In the last month, how often did you:

Go home?

Exercise?

Participate in your house's planned activities?

Drink alcoholic beverages?

Eat at least 5 servings of fruits and vegetables per day?

In the last month, how many alcoholic beverages (e.g., cans of beer, glasses of wine) did you usually consume on any given occasion?

Think back to just the last 7 days. About how many hours total did you spend studying (e.g., studying for tests, reading for class, working on homework, projects, or papers) during this time period?

Who are your favorite musical artists? List up to three, with your most favorite first.

Please check to make sure you didn't accidentally skip any items. When you are done, click on the continue button to go to the next page.

Dorm Study Survey Page 2

Part 3: Attitudes

Please indicate how much you agree or disagree with each of the following statements by using the scale provided. Even if you feel neutral about the item, try to think about which way you lean--would you tend to be more positive or negative?

| | | | | | | |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| The English only laws in Iowa are a good idea. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I approve of the job George W. Bush is doing as President. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

| | Strongly Disagree | | | Strongly Agree | | |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | -3 | -2 | -1 | +1 | +2 | +3 |
| Homosexuality is immoral. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I am a person who identifies strongly with my nationality (USA or otherwise). | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| There is nothing more vital to our national interest than a strong military. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Children respect their parents more if they get a good spanking when they deserve it. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I am a person who identifies strongly with being a UNI student. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Please check to make sure you didn't accidentally skip any items. When you are done, click on the continue button to go to the next page.

[Continue \(Page 2 of 5\)](#)

Dorm Study Survey Page 3

Part 4: Relationships

Please think of a serious committed romantic relationship that you have had in the past, that you currently have, or that you would like to have. Imagine that you discover that the person with whom you've been seriously involved became

| | | | | | | |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| immigrants and immigration in Iowa | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| fraternities/sororities | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| safety on campus (e.g., walking alone at night) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| how women balance career and children | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

- 1 = Never
 2 = Once or twice
 3 = A few times
 4 = Occasionally
 5 = Often
 6 = Very often

Please check to make sure you didn't accidentally skip any items. When you are done, click on the continue button to go to the next page.

[Continue \(Page 3 of 5\)](#)

Dorm Study Survey Page 4

Part 6: Preferences and attributions

Please give your opinions on the following items. Some ask you to use limited information to make decisions or ask you to estimate what others believe. Please make your best guess based on your experiences and the information available to you.

Ann's boyfriend Chad cheated on her by having sex with another woman. Based on your previous experiences and knowledge about relationships, how much at fault do you think each person likely was for this incident?

Not at all
at fault

Completely
at fault

| | 1 | 2 | 3 | 4 | 5 |
|-----------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Chad | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Ann | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| the other woman | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Between these two candidates, who do you prefer in the Iowa governor's race?

Tom Vilsack Doug Gross

Not eligible to vote in Iowa

Do you plan to stay in Iowa after you graduate?

Definitely leave Iowa Definitely stay in Iowa

How much do you think the AVERAGE UNI STUDENT would agree or disagree with the following statements?

| | Strongly Disagree | | | Strongly Agree | | |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | -3 | -2 | -1 | +1 | +2 | +3 |
| Illegal immigrants are taking jobs away from hard-working native-born Iowans. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| The English only laws in Iowa are a good idea. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| It is better if people marry within their own culture and race. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Brad's girlfriend Susie cheated on him by having sex with another man. Based on your previous experiences and knowledge about relationships, how much at fault do you think each person likely was for this incident?

| | Not at all at fault | | | Completely at fault | |
|---------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | 1 | 2 | 3 | 4 | 5 |
| Susie | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Brad | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| the other man | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

How much do you think the AVERAGE IOWAN would agree or disagree with the following statements?

| | Strongly Disagree | | | Strongly Agree | | |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | -3 | -2 | -1 | +1 | +2 | +3 |
| Illegal immigrants are taking jobs away from hard-working native-born Iowans. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| The English only laws in Iowa are a good idea. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| It is better if people marry within their own culture and race. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Please check to make sure you didn't accidentally skip any items. When you are done, click on the continue button to go to the next page.

[Continue \(Page 4 of 5\)](#)

Dorm Study Survey Page 5

Part 7: Friendships

One of the things we're interested in is how dorm life and the physical structure of residence halls may affect interactions and friendships. Please think about those people you are closest to (consider your best friends) in the local (UNI/Cedar Falls/Waterloo) area. List the initials of up to 6 friends below. If you have fewer than 6 close friends in the local area, leave some lines blank. If

you have more than 6 close friends, list the 6 to whom you feel the closest. This information is completely confidential. We will NOT try to contact those people you list in any way.

| Friend's initials | Does he/she live in: | | | | Address (Dorm+room) if in dorms* |
|----------------------|--------------------------|--------------------------|--------------------------|--------------------------|--|
| | Your House | Your Hall | Other Hall | Off-Campus | |
| <input type="text"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="text"/> |
| <input type="text"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="text"/> |
| <input type="text"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="text"/> |
| <input type="text"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="text"/> |
| <input type="text"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="text"/> |
| <input type="text"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="text"/> |

*If you do not know their room number, list what you do know (e.g., 2 doors down, in Shooting Star house, one floor below).

How much do you like your roommate as a friend?

Not at all A great deal
 I do not have a roommate or have more than one roommate.

How many people in your house would you consider yourself to be friends with?

Enter the number here:

Are there any people in your house who you don't really like much?

Enter the number of people you dislike on your hall here:

How honest do you think you were able to be on this survey?

Not at all honest Completely honest

Do you have any comments you would like to make about the survey, your responses, or the study in general?

Please check to make sure you didn't accidentally skip any items. When you are done, click on the submit button to submit your survey.

APPENDIX P

SURVEY 3

Dorm Study Survey Page 1

This survey should take about 10-15 minutes. Please complete it when you are alone and not distracted, so that you can be as honest and accurate as possible. All your responses are completely confidential.

Because we are interested in how attitudes and behaviors may change over time or be different at different times of the year, some of the items on this survey will be similar to those you completed on previous surveys. Other questions, however, will be new. Because this study encompasses several research projects, there will be several types of questions on each survey. After you've submitted your survey today, there will be a place where you can link to more information about some of these projects from the dorm study homepage.

There are several parts to the survey. They will be displayed on a total of five web pages.

Use the tab keys or your mouse to move from item to item. Do NOT use the return key.

Part 1: Background information

What is your code number? Your code number is the last four digits of your social security number, followed by your birth month and date. Ex: if your SSN is 325-24-5235 and your birthdate is March 7, your number would be 52350307. It is really important that you accurately enter this number so we can link your responses to the four surveys and so you can win prizes.

Code number (last 4 SSN + 2 digit birth month + 2 digit birth day):

Have you moved from the dorm room you were in when you completed the last survey (Late September)?

Yes No

If yes, please type your new address below:

Room: House: Hall:

Nature vs. Nurture:

Some people say that human behavior is more driven by biology and genes (nature), whereas others believe that behavior is more driven by experiences and culture (nurture). To what extent do you agree with one statement vs. the other?

Human Behavior is:

Completely biologically determined

Completely culturally determined

Politics and News

What is your political orientation?

- Conservative
- Moderate
- Liberal
- None or don't know

Between these two candidates, who do you prefer in the Iowa governor's race?

Tom Vilsack Doug Gross

Not eligible to vote in Iowa

Where do you primarily get your news (check all that apply)?

- Local newspaper
- National newspaper (e.g., USA Today, NY Times)
- Magazines (e.g., Time, Newsweek)
- Network TV (e.g., CBS, NBC, ABC)

- Cable TV (e.g., CNN, MSNBC)
- Radio
- Internet
- Friends (other people)
- Other

Please check to make sure you didn't accidentally skip any items. When you are done, click on the continue button to go to the next page.

Continue (Page 1 of 5)

Dorm Study Survey Page 2

Part 2: Self-perceptions

Please indicate how much you worry about each item in the list below.

| | Almost Never | | | | | Almost Always |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|------------------|
| | 1 | 2 | 3 | 4 | 5 | |
| I worry about many daily life events and situations. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| I worry about doing poorly on most exams or projects. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| I worry about what other people think about me. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| I worry a lot about past and future life events and situations. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |

Please indicate how much you agree with each statement. For your convenience, the scale is repeated at the bottom of the table.

Strongly

Strongly

| | Disagree | | | | Agree |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | 1 | 2 | 3 | 4 | 5 |
| Too often, when things go wrong, I get discouraged and feel like giving up. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I like to have a lot of people around me. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I don't like to waste my time daydreaming. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I tend to be cynical and skeptical of others' intentions. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I keep my belongings clean and neat. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I am seldom sad or depressed. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I usually prefer to do things alone. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I often try new and foreign foods. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I believe that most people will take advantage of you if you let them. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Sometimes I'm not as dependable or reliable as I should be. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | 1 | 2 | 3 | 4 | 5 |
| | Strongly Disagree | | | | Strongly Agree |

Please check to make sure you didn't accidentally skip any items. When you are done, click on the continue button to go to the next page.

[Continue \(Page 2 of 5\)](#)

Dorm Study Survey Page 3

Part 3: Attitudes Please indicate how much you agree or disagree with each of the following statements by using the scale provided. Even if you feel neutral about the item, try to think about which way you lean--would you tend to be more positive or negative?

Part 4: Campus Life

After you graduate, would you prefer to live in a small town or a large city?

Small town Large city

Are you an RA? Yes No

How much do you like living in the dorms?

Not at all A great deal

How homesick are you?

Not at all homesick Very homesick

What do you like most about living in the residence halls?

What do you like least about living in the residence halls?

Please check to make sure you didn't accidentally skip any items. When you are done, click on the continue button to go to the next page.

Continue (Page 3 of 5)

Part 5: Discussion

Earlier in the survey you gave your attitudes about the issues below. Now we would like for you to indicate how often you discussed each of these items in the last month with people in your house, using the scale below (scale values are repeated at the bottom of the table for your convenience).

- 1 = Never
- 2 = Once or twice
- 3 = A few times
- 4 = Occasionally
- 5 = Often
- 6 = Very often

| | 1 | 2 | 3 | 4 | 5 | 6 |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Living together before marriage | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Aiding refugees | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Preferential treatment of athletes | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Public Safety on campus | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Cloning | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Gen ed classes | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Abortion | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Rape | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Sex outside committed relationships | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| War with Iraq | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Whether it's okay to have sex while drunk | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Entrance to campus events (e.g., football tickets) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Part 6: Activities

In the last month, how often did you:

Participate in Intramurals?

Leave your door open while in your room?

Exercise?

Drink alcoholic beverages?

Eat at least 5 servings of fruits and vegetables per day?

In the last month, how many alcoholic beverages (e.g., cans of beer, glasses of wine) did you usually consume on any given occasion?

Think back to just the last 7 days. About how many hours total did you spend studying (e.g., studying for tests, reading for class, working on homework, projects, or papers) during this time period?

What are your favorite TV shows? List up to three, with your most favorite first.

| | | |
|----------------------|----------------------|----------------------|
| <input type="text"/> | <input type="text"/> | <input type="text"/> |
|----------------------|----------------------|----------------------|

Please check to make sure you didn't accidentally skip any items. When you are done, click on the continue button to go to the next page.

Dorm Study Survey Page 5

Part 7: Recycling

Answer the items below from -3 (strongly disagree) to +3 (strongly agree).

| | Strongly Disagree | | | Strongly Agree | | |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | -3 | -2 | -1 | +1 | +2 | +3 |
| I intend to take an active role in recycling within the dorms. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| My parents encourage recycling. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Recycling is too much of a hassle to bother with in the dorms. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Even if all the college students in the dorms recycled, it wouldn't really help solve any environmental problems. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Without dorm facilities, recycling in the dorms will fail. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| My friends think I should recycle. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I would take advantage of recycling programs available to me in the dorms. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I would support an additional per semester fee for all students (like the current computer fee) to go toward recycling programs on campus. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Part 8: Final section (Interactions)

The next few items ask you about your conversations. For our purposes, a conversation is any 2-way, real-time interaction. So listening to voice mail or reading email would not count. But talking in person, on the phone, or via instant messaging would.

Think back to what you did yesterday...

How many conversations did you have that lasted at least 10 minutes?

How many of those conversations included at least 1 other student from UNI?

What students from UNI did you have those conversations with? List the initials and information for up to 6 people. If you had conversations with more than 6 people, list the first 6 who come to mind.

| Initials | Gender | Does he/she live in: | Conversation took place: | Number of people, including you, involved: |
|--------------------------|--|---|---|--|
| <input type="checkbox"/> | <input type="checkbox"/> M <input type="checkbox"/> F | <input type="text" value="select one"/> | <input type="text" value="select one"/> | <input type="text" value="select one"/> |
| <input type="checkbox"/> | <input type="checkbox"/> M <input type="checkbox"/> F | <input type="text" value="select one"/> | <input type="text" value="select one"/> | <input type="text" value="select one"/> |
| <input type="checkbox"/> | <input type="checkbox"/> M <input type="checkbox"/> F | <input type="text" value="select one"/> | <input type="text" value="select one"/> | <input type="text" value="select one"/> |
| <input type="checkbox"/> | <input type="checkbox"/> M <input type="checkbox"/> F | <input type="text" value="select one"/> | <input type="text" value="select one"/> | <input type="text" value="select one"/> |
| <input type="checkbox"/> | <input type="checkbox"/> M <input type="checkbox"/> F | <input type="text" value="select one"/> | <input type="text" value="select one"/> | <input type="text" value="select one"/> |
| <input type="checkbox"/> | <input type="checkbox"/> M <input type="checkbox"/> F | <input type="text" value="select one"/> | <input type="text" value="select one"/> | <input type="text" value="select one"/> |

How honest do you think you were able to be on this survey?

Not at all honest Completely honest

Do you have any comments you would like to make about the survey, your responses, or the study in general?



Please check to make sure you didn't accidentally skip any items. When you are done, click on the submit button to submit your survey.

Submit (Page 5 of 5)

APPENDIX Q

SURVEY 4

Dorm Study Survey Page 1

This survey should take about 10-15 minutes. Please complete it when you are alone and not distracted, so that you can be as honest and accurate as possible. All your responses are completely confidential.

Because we are interested in how attitudes and behaviors may change over time or be different at different times of the year, some of the items on this survey will be similar to those you completed on previous surveys. Other questions, however, will be new. Because this study encompasses several research projects, there will be several types of questions on each survey. After you've submitted your survey today, there will be a place where you can link to more information about some of these projects from the dorm study homepage.

There are several parts to the survey. They will be displayed on a total of five web pages.

Use the tab keys or your mouse to move from item to item. Do NOT use the return key.

Part 1: Background information:

What is your code number? Your code number is the last four digits of your social security number, followed by your birth month and date. Ex: if your SSN is 325-24-5235 and your birth date is March 7, your number would be 52350307. It is really important that you accurately enter this number so we can link your responses to the four surveys and so you can win prizes.

Code number (last 4 SSN + 2 digit birth month + 2 digit birth day):

Are you taking Personal Wellness this semester?

Yes No

Are you taking a non-credit class (e.g., aerobics, dance, abs) at the WRC this semester?

Yes No

What is your major?

How much do you keep up with the news and current events?

Not at all Very much

Who did you vote for in the most recent election for Iowa Governor?

- Vilsack
 - Gross
 - A third party candidate
 - Did not vote in last election
 - Not eligible to vote in Iowa
-

Part 2: Friendships:

How much do you like your roommate as a friend?

Not at all A great deal

I do not have a roommate or have more than one roommate.

How many people in your house would you consider yourself to be friends with?

Enter the number here:

Are there any people in your house who you don't really like much?

Enter the number of people you dislike on your hall here:

Please check to make sure you answered all the items. When you are done, click on the continue button to go to the next page.

[Continue \(Page 1 of 5\)](#)

Dorm Study Survey Page 2

Part 3: Attitudes:

Please indicate how much you agree or disagree with each of the following statements by using the scale provided.

| | Strongly Disagree | | | | | Strongly Agree |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | -3 | -2 | -1 | +1 | +2 | +3 |
| The death penalty is barbaric and should continue to be outlawed in Iowa. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| The government is withholding information from the public on extra-terrestrial life forms. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Illegal immigrants are taking jobs away from hard-working native-born Iowans. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| It is a bad idea to join a fraternity/sorority. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Women in combat should have to take birth control pills. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| It is safe for a woman to walk alone on campus at night. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| If I heard a woman yelling or screaming in another dorm room, I wouldn't know what I could do. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

| | Strongly Disagree | | | | | Strongly Agree |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | -3 | -2 | -1 | +1 | +2 | +3 |
| Women should not work when their children are very young. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I am unhappy with the food options and quality available in the dining centers. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| It is better if people marry within their own culture and race. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| The U.S. will suffer another terrorist attack on U.S. soil within the next year. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| The English only laws in Iowa are a good idea. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

| Strongly Disagree | Strongly Agree |
|----------------------|-------------------|
|----------------------|-------------------|

| | -3 | -2 | -1 | +1 | +2 | +3 |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Homosexuality is immoral. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I am a person who identifies strongly with my nationality (USA or otherwise). | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| There is nothing more vital to our national interest than a strong military. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Children respect their parents more if they get a good spanking when they deserve it. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I am a person who identifies strongly with being a UNI student. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Dorm Study Survey Page 3

Part 4: Relationships:

Please think of a serious committed romantic relationship that you have had in the past, that you currently have, or that you would like to have. Imagine that you discover that the person with whom you've been seriously involved became interested in someone else. What would distress or upset you more (You do not have to answer this item if you feel uncomfortable about its content.):

Situation #1: Imagining your partner forming a deep emotional attachment to that person.

Situation #2: Imagining your partner enjoying passionate sexual intercourse with that person.

Definitely more upset by emotional attachment (#1)

Definitely more upset by sexual intercourse (#2)

Part 5: Activities:

In the last month, how often did you:

Participate in intramurals?

Go home?

Leave your door open while in your room?

Use the lounge areas in your house/hall?

Exercise?

Smoke cigarettes?

Eat at least 5 servings of fruits and vegetables per day?

Drink alcoholic beverages?

In the last month, how many alcoholic beverages (e.g., cans of beer, glasses of wine) did you usually consume on any given occasion?

Think back to just the last 7 days. About how many hours total did you spend studying (e.g., studying for tests, reading for class, working on homework, projects, or papers) during this time period?

In the last month, under what circumstances did you smoke? Check all that apply.

- None
- When alone
- When with friends
- When with family
- At a party
- At a club or bar
- Between classes
- Other

In the last month, under what circumstances did you drink alcohol? Check all that apply.

- None
- When alone
- When with friends
- When with family
- At a party
- At a club or bar
- Between classes
- Other

Which, if any, of these items have you recycled in the last month? (Please check all that apply):

- Cans
- Glass Bottles
- Other Glass
- Newspaper
- Magazines
- Cardboard
- Plastic
- Paper
- Oil
- Tires

What time do you usually get out of bed on weekday mornings (if it differs by day, answer with your most typical wake-up time)? :

What time do you usually go to bed on weekday nights (again, most typically)? : :

Who are your favorite musical artists? List up to three, with your most favorite first.

How much do you think the AVERAGE UNI STUDENT would agree or disagree with the following statements?

| | Strongly Disagree | | | Strongly Agree | | |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | -3 | -2 | -1 | +1 | +2 | +3 |
| Illegal immigrants are taking jobs away from hard-working native-born Iowans. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| The English only laws in Iowa are a good idea. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| It is better if people marry within their own culture and race. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

What grades have you generally made in your classes this semester (on average)?

- A
 - A-
 - B+
 - B
 - B-
 - C+
 - C
 - C-
 - D+
 - D or lower
-

We would like to confirm your contact information so that we can notify you if you win a prize (all prizes to be given out in December). This information will not be shared with anyone outside the research team or used for any non-research purpose. Please list your address and e-mail address below, even if you've given them to us before, so that we can ensure we have your correct information.

Address:

Room: House: Hall:

E-mail address:

How honest do you think you were able to be on this survey?

Not at all honest Completely honest

Do you have any final comments you would like to make about your responses, the study, or living in the residence halls in general?

Please check to make sure you didn't accidentally skip any items. When you are done, click on the submit button to submit your survey.

APPENDIX R

DROP-DOWN ITEM RESPONSE OPTIONS

Items

In the last month how often did you:

Participate in intramurals?

Go home?

Response Options

Never

Once

Twice

Three times

Four times

Five times

Six or more times

Items

In the last month how often did you:

Leave your door open while in your room?

Use the lounge areas in your house/hall?

Exercise?

Smoke cigarettes?

Drink alcoholic beverages?

Response Options

Never

One to three times

Once a week

Several times a week

Daily

Several times a day

Item

In the last month how often did you:

Eat at least 5 servings of fruits and vegetables per day?

Response Options

Never

One to three times
Once a week
Several times a week
Daily

Item

In the last month, how many alcoholic beverages (e.g., cans of beer, glasses of wine) did you usually consume on any given occasion.

Response Options

None
1-2
3-4
5-6
7 or more

Items

What time do you usually get out of bed on weekday mornings (if it differs by day, answer with your most typical wake-up time)?

What time do you usually go to bed on weekday nights (again, most typically)?

Response Options

Hours: quarter hours, AM/PM
(e.g., 6:45 AM)

Item Instructions

Think back to yesterday. What students from UNI did you have a conversation with that lasted at least 10 minutes? List the initials and information for up to 6 people. If you had conversations with more than 6 people, list the first 6 who come to mind.

Items and there Response Options

| Does he/she live in: | Conversation took place: | Number of people, including you, involved: |
|------------------------------|--------------------------|--|
| Your House | On the Phone | 2 |
| Your Hall but not your House | Online | 3-4 |
| A different Hall | In Person | 5-6 |
| Off-Campus | | 7 or more |

APPENDIX S
SURVEY HOME PAGE

Welcome to the Dorm Study homepage!

Thanks for your interest in our study! From here you can complete the survey or get more information about the study and researchers.

[Click here for the survey if you have previously completed a consent form and demographic form \(in your house meeting OR on a previous survey\).](#)

[Click here for the survey if you have NOT yet completed a consent form and survey.](#)

Other options:

- [What is the purpose of the Dorm Study?](#)
- [FAQ about the study](#)
- [List of businesses who provided prizes for the sweepstakes](#)

If you're not on our mailing list and would like to be, contact Jerry Cullum (see info below).

To contact Jerry Cullum, project coordinator, send e-mail to jcullu78@uni.edu or call 222-6107 (2-6107 on campus).

APPENDIX T

FAQ LINK

Frequently Asked Questions

- What is the purpose of this study?
- Who is conducting this study?
- Was this study approved by anyone?
- How will my responses be used?
- Are my responses truly anonymous?
- How will participating in this study benefit me?
- Why was I invited to participate?
- How can I find out the results of the study?
- What if I don't want to answer a particular question?
- Will you release these data to anyone else?

What is the purpose of the study?

We are interested in the development of college students' attitudes and behaviors over time. For more details, click [here](#).

Who is conducting this study?

Jerry Cullum, a Masters student in Psychology, is the project coordinator. He is conducting the study with Helen Harton, an Associate Professor in Psychology.

Was this study approved by anyone?

The study was approved by the University Human Participants Review Board and the Department of Residence.

How will my responses be used?

The survey data you supply will be used to evaluate and learn about college students' attitudes, behaviors, and interactions. These data will help in the evaluation of campus programs and dorm assignment schemes. The data will also be used for a Masters thesis and an honors thesis and for scientific publications and presentations.

Are my responses truly anonymous?

Your responses are completely confidential. No report of the study will ever identify you by name, codenumber, or address, or give any of your individual responses. However, we do need your contact information (e-mail and dorm address) so that we can contact you if you win a prize and so we can send you a notice of when the surveys are ready. Your contact information will be stored separately from your survey responses, and only the project coordinator (Jerry Cullum) and his supervisor (Helen Harton) will have access to that information. After the prizes have been distributed, all contact information will be destroyed.

How will participating in this study benefit me?

The most direct, tangible benefit for you is your entry into our [sweepstakes](#). If you

complete all four surveys, you'll have a better than 1 in 10 chance of winning some cool prizes. In addition, the more people who respond to the survey, the better our results will be. These results will help scientists better understand the development of attitudes. The results will also indirectly benefit you as a summary of the results are shared with those in charge of campus programs and residence hall life. By evaluating the effectiveness of campus programs, we can help create better, more effective programs and a safer and healthier campus for everyone.

Why was I invited to participate?

We invited all residents of four UNI residence halls, Lawther, Shull, Rider, and Hagemann, to participate. These halls were chosen because they had similar numbers of people and room setups in each house.

How can I find out the results of the study?

We will post the results of the survey on the Dorm Study homepage when they are completed, around April 2003. We will also send out an e-mail to participants letting them know when the results are posted.

What if I don't want to answer a particular question?

We hope that you will feel comfortable answering all items, as this will increase the validity of our results. But you can always skip a question if you do not feel comfortable answering it.

Will you release these data to anyone else?

We will never give out your e-mail address or other personal information to anyone else, and we will destroy our records of them after the study is completed. Summaries of some of our results will be made available to various groups (e.g., the SAVE project, the Department of Residence), but that information will not identify you personally in any way. We will only release results at the group level.

APPENDIX U

PURPOSE OF THE DORM STUDY LINK

What is the purpose of the Dorm Study?

The surveys you fill out during the semester are used for a variety of projects. Some of the projects are more theoretical (e.g., understanding how attitudes change), whereas others are more applied (e.g., evaluating students' feelings of safety on campus). Some of these data will be used for a Masters Thesis (Jerry Cullum's) and an honors thesis as well as other scientific presentations and publications. Some items will also be used to help evaluate campus programs such as the SAVE violence prevention program. We will share relevant group-level results (never identifying you personally) with other campus entities (e.g., the Department of Residence, the SAVE group) as well. They may use this information to help improve dorm and campus life and create a healthier, safer, and more satisfying college experience for all UNI students.

Some of the research questions we are trying to answer include:

- How do attitudes about a variety of different types of issues develop and change over time, both within a semester and from freshman to senior year?
- How does the importance of an issue or how much it's talked about affect attitudes?
- How do people feel about recycling in the dorms, and how do these feelings relate to recycling behaviors?
- How much do college students do healthy or unhealthy behaviors, and how does this relate to the time of year or to how identified they feel with UNI?
- What variables relate to greater satisfaction with UNI and residence hall life? How do life events and stress affect satisfaction?
- How much diversity is there in attitudes toward popular culture among dorm residents?
- What makes people jealous?
- How do people perceive those who cheat in relationships?
- What is perceived as "attractive" in a romantic partner, and how does that relate to other attitudes and experiences?
- How do attitudes toward political candidates change over time?
- How effective are programs to reduce violence and increase feelings of safety on campus?
- Do UNI students generally plan to remain in Iowa or leave after graduation? What variables relate to a desire to stay or leave?
- What do people perceive the attitudes of the average student or the average Iowan to be?
- Does the physical layout of the residence halls affect the formation of friendships?

When the study is completed around April 2003, we will post the overall results (again, not identifying anyone personally in any way) on the web so that you can see what we found.

The success of this study and our findings depend on the cooperation of students like yourself. We really appreciate your taking the time to complete the surveys!

APPENDIX V

POST-SURVEY THANK YOU PAGE

Thanks for participating!

Your results have been submitted. You will be entered into the drawing for the sweepstakes prizes.

We will send you another e-mail in about a month letting you know when the next survey is ready.

Thanks again!!! We really appreciate your time and effort.

[Close Window]

APPENDIX W
ITEM DISCUSSION LEVELS

Table 12

Item Discussion Mean and Standard Deviations

| Low Importance Items | <i>M</i> | <i>SD</i> |
|--|----------|-----------|
| 1. Athletes should get to sign up for classes before all other students. | 1.60 | .93 |
| 2. Marijuana use should be legalized. | 1.72 | 1.17 |
| 3. The government is withholding information from the public on extra-terrestrial life forms. | 1.27 | .75 |
| 4. It's okay to have sex with someone you just met. | 2.89 | 1.53 |
| 5. It is a bad idea to join a fraternity/sorority. | 2.89 | 1.42 |
| 6. Women in combat should have to take birth control pills. | 1.20 | .67 |
| 7. The English only laws in Iowa are a good idea. | 1.25 | .72 |
| 8. It is a good idea to automatically charge students a set fee each year for an all-activities pass so they can get into campus events. | 2.08 | 1.16 |
| High Importance Items | | |
| 1. Living with your romantic partner before marriage is a good idea. | 2.06 | 1.19 |
| 2. Refugees should be left to fend for themselves. | 1.20 | .60 |
| 3. If I heard a woman yelling or screaming in another dorm room, I wouldn't know what I could do. | 2.02 | 1.25 |
| 4. The death penalty is barbaric and should continue to be outlawed in Iowa. | 1.19 | .56 |
| 5. Campus Public Safety officers should carry guns. | 2.32 | 1.25 |
| 6. Cloning another human being is completely unethical. | 1.24 | .65 |
| 7. Liberal arts core classes are a waste of time. | 3.05 | 1.40 |
| 8. Abortion should be freely available on demand. | 1.79 | 1.12 |
| 9. Women tend to exaggerate how much rape affects them. | 2.02 | 1.21 |
| 10. Illegal immigrants are taking jobs away from hard-working native-born Iowans. | 1.41 | .89 |
| 11. It is safe for a woman to walk alone on campus at night. | 3.12 | 1.42 |
| 12. The U.S. should use military force in Iraq. | 1.94 | 1.21 |
| 13. Women should not work when their children are very young. | 1.66 | 1.09 |
| 14. A man should never have sex with a woman who is drunk. | 1.93 | 1.28 |