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**THE CONCEPT OF LEISURE CROSS-CULTURALLY:  
AN EXAMINATION OF LEISURE TERMS ACROSS THREE LANGUAGES**

A Dissertation in  
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by

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## ABSTRACT

Individuals in every culture across the world participate in activities not directly related to survival, including dancing, games, play, and socializing. Such leisure activities may have important implications for cultural development and evolution, physical and mental health, and the management of life stressors. To gain a better understanding of leisure, it is important to determine the meanings associated with the word and related terms across groups. For example, academics may view the terms differently than non-academics. It is important to know whether or not members of other linguistic traditions have words for the concept of leisure or related terms. The purpose of this study is to study the meanings associated with leisure terms among academics, non-academics, and speakers of Chinese and Persian.

The present study consists of three steps. First, I had researchers identify words related to leisure as well as characteristics associate with the term. Second, I created a survey measuring the perceived similarity of the terms among a sample of academics and a sample of non-academics. Third, I had native speakers of Chinese and Persian complete a translation/back-translation task using the terms in order to identify possible translations of the domain terms for each language.

The findings suggest the academic and non-academic samples share some similarities in their perceptions of the leisure terms domain. Both groups appear to agree, overall, on which terms belong in the domain. They also tend to view the domain terms as representing concepts or experiences that are enjoyable and that provide opportunities for freedom. However, there are also distinct differences in the perceived similarities of the words as well as the meanings associated with those words. The word *pastime* appears to not belong to the leisure terms domain in the minds of non-academics. Academics and non-academics also hold different views

regarding how the words *amusement* and *entertainment* relate to the other words in the domain. With respect to the translations, both languages appear to have more-or-less direct translations for the word leisure. However, the Persian language appears to have a somewhat smaller vocabulary for leisure domain terms than does Chinese.

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## INTRODUCTION

Individuals in every culture across the world participate in activities not directly related to survival, such as socializing, music, dancing, play, and games and sports (Brown, 1991; Chick, 1998a; Murdock, 1945). Participation in such leisure, or free time, activities often allows individuals to express their emotions or entertain themselves and appears to occupy a considerable amount of time (e.g., Chick, 1995a; Robinson & Godbey, 1999). Given the prevalence of leisure, several authors have argued that leisure may have important implications for cultural development and evolution (Boas, 1940; Chick, 1986; Kroeber, 1948; Malinowski, 1931), social control (Chick, 1995b; 1998a; Sutton-Smith, 1997), physical and mental health (Dressler, Balieiro, Ribeiro, & dos Santos, 2005; 2007; Reyes-Garcia, et al., 2009), and the management of life stressors (Iwasaki, Mactavish, & McKay, 2005; Kleiber, Hutchinson, & Williams, 2002; Schneider & Iwasaki, 2003).

If researchers are to fully understand the impact of leisure on individuals and societies, it is necessary to understand the meanings associated with the concept. That is, it is important to consider how researchers or professionals as well as non-professionals think of and view the phenomenon (Harris, 2001). In the United States, academics, especially those in the field of leisure studies, commonly define leisure as free time (Brightbill, 1960; May & Petgen, 1960), a particular set of activities (Dumazedier, 1974; Neumeyer & Neumeyer, 1958), or as a state of mind or experience (de Grazia, 1964; Neulinger, 1974). In general, researchers and educators use the term to refer to the category or sphere of non-work behaviors or experiences although they frequently cannot agree on how the word should be defined or what it means. In contrast, non-academics typically do not use the term despite being familiar with the word. Rather, they appear to use words such as recreation or free time in their everyday conversations. While researchers

consider the words recreation and free time related to leisure, such discussions are not clear as to the extent of their similarity or what other words may also be similar (Kelly, 2012; Godbey, 2008). Failure to better understand the meanings associated with leisure and related terms by academics and non-academics will impede research and education on the topic.

If leisure exists in all cultures or societies, it is also important for researchers to understand the phenomenon, including meanings associated with it, in non-Western societies. Unfortunately, most social scientists have paid little attention to matters of leisure while leisure scholars have given little attention to the study of leisure outside of Western societies (Chick, 1998a; Valentine, Allison, & Schneider, 1999). While there have been efforts to study leisure or specific leisure topics cross-culturally, no one has systematically investigated the existence of leisure-related lexicons across cultures or languages. Of course, research into the leisure of other cultures would be aided by knowledge of how individuals in those cultures talk about and refer to leisure. Thus, it is important to know whether or not members of other linguistic (i.e., non-English) traditions have words for the concept of leisure as well as what terms are used to refer to the leisure domain.

As a first step in addressing these issues, the present study has three goals. First, I use cognitive anthropology techniques to examine the domain of leisure terms amongst leisure researchers and educators. Second, I compare the content and structure of the leisure terms domain of academics with that of non-academics. Third, I conduct translation/back-translation tasks in Mandarin Chinese and Persian as a first step is identifying translations for the leisure domain terms in the respective languages.

## **BACKGROUND**

### **The Anthropology of Leisure**

Anthropologists have long held an interest in the leisure pursuits of populations. The ethnographic record contains many accounts of games, art, music, dance, myths, riddles, religion, sexual behavior, and body adornment practices (Brown, 1991; Chick, 1998). However, anthropologists rarely use the term leisure. Instead, “they typically encompass leisure and entertainment with the rubric ‘expressive culture’” (Chick, 1998a, p. 111), referring to the ways in which individuals express their emotions and the supernatural. In contrast, the instrumental-utitarian domain contains information related to material aspects of life (i.e., production and reproduction; Chick, 1998a; Harris, 2001). That is, the expressive domain includes knowledge of activities such as religion, the arts, and recreation or leisure while the instrumental domain includes knowledge needed to obtain food and water, construct shelters, and raise children. The dichotomization of cultural knowledge into expressive and instrumental domains is not absolute and the information does overlap. Rarely is an artefact, behavior, or information purely instrumental or expressive. However, the dichotomy is a useful heuristic for categorizing and thinking about cultural content (Chick, 1998a).

Despite an interest in leisure, anthropologists traditionally have devoted far more attention to instrumental aspects of culture. When anthropologists do study leisure, they tend to focus on specific activities, such as art (e.g., Fischer, 1961; Merrill, 1987), music and dance (e.g., Lomax, 1968), religious festivals (e.g., Chick, 1981), and games (e.g., Roberts, Arth, & Bush, 1959; Chick, 1998b). Systematic, cross-cultural research on leisure behavior is typically devoted to specific activities. Games have been the topic of several comparative studies of leisure activities (e.g., Blanchard, 1995; Chick, 1998; Roberts, Arth, & Bush, 1959; Roberts & Sutton-

Smith, 1962). For example, Roberts, Arth, and Bush (1959) found that games of physical skill are prevalent across cultures while games of strategy are generally limited to complex and socially hierarchical societies. Roberts and his colleagues have suggested that games serve as “cultural models” of the real world providing individuals opportunities to learn important skills necessary to live in society. Games of strategy, by modeling social interaction, may provide individuals opportunities to learn skills for dealing with real world situations.

Relatively few studies have been directed towards the study of the more “mundane” or “everyday” activities, such as passive conversations, individuals pursue to pass the time. In one exception, Reyes-Garcia and colleagues (2009) examined the influence of leisure on happiness and well-being among the Tsimane’ in the Bolivian Amazon. Their findings suggest that “social, not solitary, leisure has a positive and statistically significant association with subjective well-being” (Reyes-Garcia, et al., 2009, p. 432). A few other studies have also aimed to examine the general range of leisure activities in a singly culture or society (e.g., Blanchard, 1982; Gihring, 1983; Chick, 1991; Khan, 1997). In a cross-cultural study of leisure time, Rubin, Flowers, and Gross (1986) used time allocation data for four culturally similar Amazonian groups to demonstrate that individuals could reduce caloric needs by increasing the proportion of “low energy cost” (or passive) leisure in order to adjust to resource depletion. While anthropological research devoted to leisure topics is relatively low, the existing research suggests that understanding leisure may be important to fully understanding culture and cultural groups.

### **Definitions of Leisure**

While anthropologists have devoted little attention to leisure, the field of leisure studies is devoted primarily to research on the topic. In effect, the aim of the field is to better understand leisure, its effects on people’s lives, and the application of that information for practitioners in

the leisure and recreation field. As a result, leisure researchers have long been interested in defining the concept of leisure. However, efforts to produce a clear conceptualization of the phenomenon have been particularly challenging. A variety of leisure definitions have been proposed over the years, sometimes with rather different or conflicting meanings (Kelly, 1996). Over the years, leisure has most often been defined as free time (Brightbill, 1960), as particular set of activities (Dumazedier, 1974), and as a state of mind or experience (Neulinger, 1974). Other definitions have also been proposed, but none are without limitations, nor has any reached consensus.

Defined as free time, leisure is “the time surplus remaining after the practical necessities of life have been attended to” (May & Petgen, 1960, p. 3). In other words, once tasks that help maintain survival, such as work, have been taken care of, individuals have the remaining time as leisure (Gross, 1963; Kelly, 1972; Murphy, 1974). Despite the apparent straightforwardness of this definition, numerous authors have raised objections to the concept of “necessities.” As a result, considerable attention has been directed at defining necessities and who decides they are necessities (e.g., Bregha, 1985; Farina, 1985; Goodale & Godbey, 1988; Kelly, 1996; Witt & Ellis, 1985). One popular solution equates leisure to time not devoted to economically productive, often paid, work (e.g., Gist & Fava, 1964; Kelly, 1972; Parker, 1976; Yukic, 1970). However, this approach tends to neglect domestic labor and other necessities that must be done despite the lack of pay, such as eating, sleeping, and preparing for work (Brightbill, 1960; Giddens, 1964; Kelly, 1972). Moreover, equating leisure with time not devoted to paid labor is only useful for societies in which paid labor is the primary means of making a living.

Similarly, authors have objected to the idea of “free” time noting that it is often unclear what makes it “free” time. Some authors (Goodale & Godbey, 1988; Kelly, 1996) have argued

the only solution is to allow individuals to subjectively determine what constitutes free time. As a result, some advocates of a free time definition of leisure have included the component of choice (Clawson & Knetsch, 1974; Parker, 1976; Roberts, 1978). That is, leisure is the time outside of work “to be used according to our own judgment or choice” (Brightbill, 1960, p. 4). An important consideration is that most of what we do “has some elements that limit our freedom” (Kelly, 1996, p. 8). How much choice must we have for a decision to be “our own?”

Defined as activity, leisure encompasses activities that occur apart from work and other necessities (Neumeyer & Neumeyer, 1958) or unobligated activities in which individuals have an element of choice (Dumazedier, 1960; 1974; Kaplan, 1975; Williams, 1961). As activity, leisure is essentially “free time activities.” Thus, like free time definitions, it remains unclear what constitutes an unobligated (or free) activity, and the same objections to defining “free time” apply to “unobligated activities” (Goodale & Godbey, 1988; Kelly, 1996).

In practice, researchers often develop a list of activities generally thought to be leisure (e.g., baseball, playing music, and watching television). However, the implicit assumption that the activities are leisure may not be correct. Whether the activities occurred in free (or unobligated) time is typically not considered. Moreover, the activity lists used are often incomplete. Value judgments or other unintentional biases often lead researchers to omit common or less “ideal” leisure activities from such lists (Godbey, 2008). Sex, for example, is often not included in lists of leisure activities. And leisure researchers have a tendency to focus on activities on which funding agencies want or need information, such as backpacking or whitewater rafting. Many lists of leisure activities are limited to leisure activities of North America or Europe. Of course, even if a list of specific activities were complete for one location in the United States, it is unlikely it would be complete for another location in the United States,

much less cultures on the opposite side of the planet (Dong & Chick, 2012). Underlying this problem is that advocates of this approach have only identified instances of leisure. There is only an implicit definition of leisure. No one has defined why such activities are *leisure* activities.

Since the 1970s, leisure has been increasingly defined as a state of mind or experience (de Grazia, 1964; Neulinger, 1974). As a state of mind or experience, leisure is often thought to require perceived freedom, be intrinsically motivated or free from externally imposed rules, and lack instrumentality (Neulinger, 1974). That is, leisure is a preferred experience (Mannell & Kleiber, 1997). It should be noted that many proponents of experiential definitions of leisure, implicitly or explicitly, insist leisure occurs outside of work (Iso-Ahola, 1999; Kelly, 1996). The implication is that experience, on its own, is not a sufficient definition of leisure. Occasionally, this leads to confusion over exactly how leisure is defined. For example, Mannell and Kleiber (1997) state that when “leisure is defined in terms of what people think and feel, researchers use measures that reflect mental experience while engaged in leisure activities” (p. 55).

While leisure has received the most attention, researchers also recognize several words that are related, but not identical, to the concept of leisure. Introductory texts for the field frequently make it a point of discussing concepts such as recreation and play (e.g., Godbey, 2008; Kelly, 2012; McLean & Hurd, 2012; Russell, 2013). However, these terms have received considerably less attention from leisure researchers. Recreation is generally considered to be closely related to leisure and is often reserved for active behaviors, especially those that are formally organized. Reading for pleasure, for example, would be considered a leisure activity but not a recreational activity. Play has been the focus of considerable research and debate (Burghardt, 2005; Sutton-Smith, 1997), although much of the literature has come from outside of the leisure studies field. When leisure researchers discuss the term play, they frequently use it to

refer to active pursuits. Traditionally, play has also been used more often to refer to the activities of children and not adults (though adults do play games and sports, and their child-like activities may also qualify). In contrast to recreation, the word play tends to connote an unorganized or “free” activity. Other terms, such as pastime and hobby, are used less frequently to refer to leisure behaviors and lack explicit definitions. However, questions about which words are most related, or substitutable, for leisure as well as the meanings of those words are far from resolved.

### **Emics and Etics**

Most academic discussions of leisure approach the topic from a top-down perspective. That is, such discussions are concerned with how academics or professionals think about and define the terms. With respect to leisure, the aim has been to develop theoretical or ontological definitions. Little attention has been aimed at understanding how non-professionals think about leisure-related words or use them (but see Liu, Yeh, Chick, & Zinn, 2008; Mobily, 1989; Parr & Lashua, 2004; Purrington, Chick, & Yarnal, 2012; Shaw, 1985 for exceptions). Anthropologists and linguists typically use the terms “emic” and “etic” to describe the difference in these viewpoints. An “emic” description or analysis is focused on the participants’ perspective while an “etic” description of analysis is aimed at the outsider or researcher perspective (Harris, 2001). As described by Marvin Harris (2001, p. 32):

“Emic operations have as their hallmark the elevation of the native informant to the status of ultimate judge of the adequacy of the observer’s descriptions and analyses. The test of the adequacy of emic analyses is their ability to generate statements that the native accepts as real, meaningful, or appropriate. Etic operations have as their hallmark the elevation of observers to the status of ultimate judges of the categories and concepts used in description and analysis.”



Etic descriptions and analyses are generally from the perspective of a researcher or, ideally, a community of researchers. Of course, they are not inherently better or worse than emic descriptions. However, using the terms is a helpful heuristic for guiding research.

Researchers have largely neglected to investigate how non-professionals in Western societies think about leisure and related terms, and rarely have researchers considered whether leisure or related concepts occur in other languages. Like definitions, most discussions of the existence and meanings of leisure and related concepts have been limited to the researchers' (or etic) point of view. Such discussions, when they do exist, appear to be subjective and based on limited or outdated research. Nash (1960, p. 87), for example, claims that "amusement and entertainment were unknown concepts" among "primitives" while deGrazia (1964, p. 9) claims that "leisure cannot exist where people don't know what it is," suggesting the concept does not occur in all languages.

### **Culture, Language, and Semantic Domains**

Given their socially transmitted and shared nature, languages and meanings are inherently cultural. The concept of culture has gained both academic and popular currency in the past few decades (Chick, 2009; Cronk, 1999). In popular culture, every nominal group seems to have its own "culture" that explains why it is the way it is. Culture has been a central concept of anthropology since the founding of the discipline. Tylor (1871, p. 1) offered one of the first anthropological definitions of culture, stating "Culture or civilization, taken in its widest ethnographic sense, is that complex whole which includes knowledge, belief, art, morals, law, custom, and any other capabilities and habits acquired by man [sic] as member of society." While many anthropological definitions of culture have been proposed since Tylor's definition,

their proponents generally agree that culture is shared and learned information. Some anthropologists go further to include behavior or artifacts (or both), but others do not.

Anthropologists following the ideational and cognitive traditions generally limit culture to the shared and learned information in individuals' heads. According to Goodenough (1957, p. 167), "A society's culture consists of whatever it is one has to know or believe in order to operate in a manner acceptable to its members." More specifically, culture can be defined as "information capable of affecting individuals' behavior that they acquire from other members of their species through teaching, imitation, and other forms of social transmission" (Richerson & Boyd, 2005, p. 5). In this tradition, behavior is the product of cultural information, but it is distinct from culture.

If culture is socially learned and shared information, then individual cultures are groups of individuals who possess similar information. According to Roberts (1964, p. 438), it is possible to "view any single culture as an 'information economy' in which information is received or created, retrieved, transmitted, utilized, and even lost." "People in culturally distinct groups behave differently, mostly because they have acquired different skills, beliefs, and values, and these differences persist because the people of one generation acquire their beliefs and attitudes from those around them" (Richerson & Boyd, 2005, p. 6). Individuals with different leisure patterns, for example, behave differently because of differences in leisure-related cultural information.

Of course, anthropologists recognize that cultures (cultural groups) are not bounded, highly structured, or coherent wholes. Rather, cultures are composed of numerous, generally interrelated pieces of information which vary in size and degree of interrelatedness (Richerson & Boyd, 2005). Cognitive anthropologists also recognize that cultural information is not

universally shared among the members of a given culture (Brumann, 1999; Goodenough, 1971; Richerson & Boyd, 2005). Individuals' knowledge and understanding are based on their experiences. Since individuals do not all share the same experiences, even within the same culture, it is highly unlikely that individual cultural traits, let alone an entire cultural repertoire, would be completely shared.

Both cultural information and the words used to express that information are diverse. Cognitive anthropologists aim to understand the information that makes up a domain as well as “the form of things that people have in mind, their models of perceiving, relating, and otherwise interpreting them” (Goodenough, 1957, p. 167). Some information is more closely related than other information. The pieces of information that are related to one another and form a larger category are referred to as a cultural domain. That is, a domain is “an organized set of words, concepts, or sentences, all on the same level of contrast that jointly refer to a single conceptual sphere” (Weller & Romney, 1988, p. 9). Together, the individual items form a “mutually interdependent system reflecting the way in which a given language or culture classified the relevant conceptual sphere” (Weller & Romney, 1988, p. 9). Since individuals will differ in terms of their knowledge of any given domain, key elements will be shared more-or-less by many individuals while more differences exist in the details. Further, individuals on the periphery of the “core” will be less likely to share the same information to the same degree as they are less likely to encounter individuals with the established core of information.

While other cultural information may, and probably does, exist, it is the information that people are able to articulate (i.e., talk about) that is most amenable to study. From a practical standpoint, language is a primary vehicle for understanding what is in other people's minds. Word meanings are not inherent to the words. The users of a given language shape the meanings

of words. Every “individual has an internal cognitive representation of the semantic structure in which the meaning of a term is defined by its location relative to other terms” (Romney, Moore, Batchelder, & Hsia, 2000, p. 518). Using the cultural domain model, the meaning of a word can be determined by assessing how similar it is to other words. Combining the individual representations produces a “composite picture” of the shared meaning of the word. The meaning for words belonging to the domain of leisure terms can be assessed by having users of the terms identify items that belong in the domain (called “populating” the domain) and measuring the relationships (i.e., similarities and differences) among the resulting terms.

There are several techniques for populating, or identifying the items that belong within, a given cultural or semantic domain (Boster, 2005). One popular and well-established task is referred to as free listing (Borgatti, 1996a; D’Andrade, 1995). Free listing is an elicitation task in which individuals are asked to name, or write down, all of the items that match the given description. For example, individuals may be asked to write down all of the *bad words* they can think of (Borgatti, 1996a). The compiled lists often result in a few “core” items that are identified by most of the group followed by a list of items that declines in frequency. It is common to obtain lists with “long tails” of items mentioned by only one or two informants. The standard practice is to truncate the list at the point (or “elbow”) separating the “core” items from the rest. In the absence of an obvious cut-off point, it is possible to limit the list to the most popular items, retaining the number most feasible for later tasks (e.g., paired comparisons, triad comparisons).

Several techniques also exist for measuring the perceived similarity of domain items. Triadic comparisons involve presenting participants with a trio of domain items and asking them to select the item most unlike the others (Borgatti, 1996a). Selecting one item serves as a “vote” for the similarity of the other two items. One challenge with triadic comparisons is that the

number of possible combinations can quickly become unwieldy. As a result, incomplete designs are often used to reduce the number of comparisons, although the model makes certain assumptions in order to obtain the similarities.

Pile sorts are also common techniques for measuring item similarities. For example, researchers may print all domain items on individual cards and ask participants to group them. One challenge is that participants may produce different numbers of piles. Another challenge is that it typically requires researchers be present to collect the data. One of the most direct ways to measure similarities is to use paired comparison ratings. In this procedure, participants are presented with a pair of items from the domain and asked to rate the similarity of the two words on a  $k$ -point scale (Borgatti, 1996a). This process is repeated for all pair combinations. The use of paired comparisons is a simple and direct method of similarity data that can be validly compared across nations (De Beuckelaer, Kampen, & Van Trijp, 2011).

### **Research on Leisure Meanings**

Use of the English word “leisure” dates to the 14<sup>th</sup> century. It is derived from the Old French word *leisir* meaning “capacity” or “permission” which developed from the Latin word *licere* meaning “be permitted,” such as in the modern word “license” (Godbey, 2008; Goodale & Godbey, 1988). The modern use of “leisure” as a word meaning one’s free time (or similar connotations) is in keeping with the etymology of the word. Similarly, in the early-to-mid 1800s, the word “leisure” was increasingly used in the phrase “leisure class” to denote a class of individuals who had the freedom (or, were permitted) not to work (Godbey, 2008; Goodale & Godbey, 1988). The term was popularized by Thorstein Veblen (1899) in his book, *The Theory of the Leisure Class*. For many individuals, the idea of the leisure class, and associated negative

connotations, appear to remain firmly in place as few individuals use the term in everyday conversations to describe their own free time behavior.

As noted earlier, leisure researchers have traditionally paid little attention to the meanings non-academics or non-professionals have of leisure or related terms. Such efforts began to appear around the same time that researchers began to consider leisure as an experiential phenomenon. As a result, several of these studies were aimed at understanding the key determinants of the subjective experience. Iso-Ahola (1979) had U.S. undergraduate students rate eight activity scenarios to determine which meant leisure to them. He found that scenarios with perceived freedom, intrinsic motivation, and low work orientation were typically identified as leisure by participants. In a similar study, Unger & Kernan (1983) found perceived freedom and intrinsic satisfaction (which they argue was related to intrinsic motivation) to be key determinants of leisure among a sample of Cincinnati, Ohio adults. Baldwin & Tinsley (1988) also found that U.S. college students rated intrinsic motivation higher in leisure than in work.

Studies aimed at a more “grounded,” or bottom-up, understanding of leisure meanings have been rare. In 1985, Shaw produced one of the first such efforts to examine the meanings associated with leisure. In her study, Shaw (1985) used time diaries to examine perceptions of leisure among 60 couples of Halifax, Canada. She found that participants were not consistent in their categorization of a given activity as “leisure” or “work.” However, participants tended to agree on the factors they used to differentiate activities as leisure or non-leisure. The factors identified by Shaw (1985) included enjoyment, relaxation, freedom of choice, and intrinsic motivation. In a study of U.S. high school students, Mobily (1989) found that individuals generally thought of both leisure and recreation as pleasurable (see also Gunter, 1987). The students also tended to identify leisure with passive activities while they viewed recreation in

terms of active sports. Lee, Dattilo, and Howard (1994) also found that participants occasionally reported stress while engaged in leisure experiences, although such views faded with time.

Schulz and Watkins (2007) developed and tested a scale to measure the “several different ways of experiencing the meanings of leisure” (p. 492). To accomplish this, the authors had participants rate several statements about leisure. The responses were then analyzed using factor analysis to identify four dimensions, which the authors labeled as “passing time,” “escaping pressure,” “exercising choice,” and “achieving fulfillment.” Parr and Lashua (2004) used cultural consensus analysis to determine whether leisure professionals in Ohio agreed on the meaning of leisure. Based on the literature, the authors created 30 True/False statements describing aspects of leisure. The results indicated that the leisure professionals agreed on their responses. The responses provided by the professionals also matched those provided by a sample of non-professionals. Participant responses indicated they think of leisure as both an experience and an activity. They also believe leisure meanings are shaped by one’s cultural background and that individuals differ on what is considered leisure. Additionally, in a free listing task with both samples, Parr & Lashua (2004) found the most common responses to the prompt “leisure” were “passive/relaxation,” “enjoyment/fun,” and “activities.”

While many of the studies investigating leisure meanings have been directed at English-speaking populations, some researchers have investigated leisure meanings in other languages. Chinese has been a particularly popular non-English language investigated by researchers. However, Chinese is not a single language but a group of related languages that form one of the branches of the Sino-Tibetan language family (Ethnologue, 2014; Handel, 2008). There are 298 individual living languages spoken in China, which comprise 13 regional language groups. The most commonly spoken of the regional groups is Mandarin, a dialect of which is spoken by 70%

of Chinese language users (approximately 840 million speakers according to a 2000 census; Ethnologue, 2014). In the early 1900s, the Beijing dialect of Mandarin served as the basis for the national language, referred to as Standard Chinese or Mandarin (Chen, 1999). Standard Chinese is the language most commonly studied by leisure researchers as it is the national language of both the People's Republic of China and the Republic of China (i.e., Taiwan), one of the official languages of Singapore, and an official language of the United Nations (Chen, 1999; UN, 2014).

Using an experience sampling method, Walker and Wang (2009) investigated Chinese-Canadians' leisure meanings. The results indicated that participants' leisure activities tended to be passive (see also Freysinger & Chen, 1993; Yin, 2005). The authors also found that the Chinese-Canadians characterized leisure activities as having low effort, high intrinsic motivation, and low internalized reward motivation. Research on leisure meanings among female Chinese emigrants (Ho & Card, 2001) and among Chinese graduate students attending a U.S. university (Li & Stodolska, 2006) found that participants most commonly associate leisure with the idea of relaxation. The findings of these studies is interesting as the Chinese word for leisure, *Xiu xian*, is historically tied with notions of rest, relaxation, or taking a break and currently means "free time" or "idleness" (Liu, Yeh, Chick, & Zinn, 2008).

A language (and culture) that has received relatively little attention from leisure researchers is that of Persian. The Persian language belongs to the Indo-Iranian branch of the Indo-European language family, the largest language family with respect to the number of speakers (Ethnologue, 2014). Persian is spoken in Iran, Afghanistan (where it is called Dari), Tajikistan (where it is called Tajiki), and other regions that historically fell under the influence of Persia (Beeman, 2005; Clawson & Rubin, 2005). The Persian language is called Farsi in Iran, and despite some use of the term Farsi in English, Persian is traditional and has been declared



more appropriate by the Academy of Persian Language and Literature (Suren-Pahlav, 2007). Modern (or New) Persian is descended from Middle Persian and subsequently from Old Persian and dates to approximately 800 AD (Ethnologue, 2014; Johanson, 2006). While the language has changed, especially with respect to its vocabulary in recent centuries, the language has remained relatively stable over the last millennium, especially in terms of morphology. During earlier periods during this time, Persian was frequently used as a transregional bridge language (or lingua franca) and as an official and literary language in the Islamic world and India (Clawson & Rubin, 2005; Johanson, 2006). While there is undoubtedly participation in leisure by Iranians and other Persian speakers and there is a long Persian literary tradition, it remains unclear whether Persian contains a word that is more-or-less directly synonymous with the English word 'leisure.'

According to Chick (1998a, p. 116), "informal research has suggested that most languages lack a word that can be directly translated into English as 'leisure.'" The evidence that does exist for the existence of the leisure concept cross-linguistically comes from a classroom exercise conducted by Chick (1998a). In a multi-national graduate class at the World Leisure and Recreation Association International Centre of Excellence at the University of Wageningen, The Netherlands, students translated the English words *play*, *recreation*, and *leisure* into their respective native languages using a single word, if possible, or a phrase, if necessary. The students were then asked to translate the native word or phrase back into English. "The goal was to determine whether the same English words with which the experiment began would result from the translation and back-translation" (Chick, 1998a, p. 117). The languages assessed included Arabic, Indonesian, Italian, Flemish, French, German, Hindi, Nepalese, Polish, Spanish, and Xhosa. The words *play* and *recreation* were translated back into English as the same words 7

of 11 times (Chick, 1998a). However, leisure was only back-translated to English as leisure once (French). For all but one of the other translations, the “back-translation resulted in ‘free time’ or a close equivalent” (Chick, 1998a, p. 117). Xhosa was the only language into which *leisure* could not be translated<sup>1</sup>.

This classroom exercise, however, suffers from methodological issues. First, the same individual was responsible for both the translation and the back-translation. The back-translation should be conducted by an independent speaker of that language. Second, for many of the languages, only one speaker was tested. Larger samples for each language would permit reliability testing. These issues aside, this experiment does suggest that words meaning *play* and *recreation* occur most frequently across languages while a word meaning *leisure* occurs far less frequently (Chick, 1998a; Chick, Makopondo, & Winneshiek, 2009).

### **Research Questions**

Most discussions of leisure terms have focused on the word leisure and its meaning. While such discussions have been directed at an etic definition or understanding of the term, most efforts have been disconnected to what researchers actually mean by the word. For example, many authors have attempted to identify the “ontologically true” definition of leisure or have focused on philosophical aspects of the word (e.g., Witt & Ellis, 1985). Because of the focus on leisure, related terms, such as recreation, hobby, pastime, and play, have been understudied. As a result, it is not clear, from the researchers’ viewpoint, how similar these terms are to one another. Thus, the first phase of this study is aimed at understanding the words leisure researchers and educators use as synonyms for leisure. That is, what is the content and structure of the leisure terms domain for academics? To address this, Phase One had five objectives:

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<sup>1</sup> Chick (personal communication, March 16, 2012) suggests the student could have translated the word if desired but declined to participate.

- Identify words that comprise the etic leisure terms domain
- Identify attributes (characteristics) associate with these words
- Assess the perceived similarities of these words
- Measure the words with respect to the identified attributes
- Determine whether the attributes explain the observed similarities of the words

Research aimed at an emic understanding of leisure terms has increased. However, few have adopted the perspective or methods of cognitive anthropology. Research into the correspondence of etic and emic understandings of leisure terms have also been rare (see Parr & Lashua, 2004, for an exception). One goal of Phase Two is to assess the emic understanding of the leisure terms domain and compare it with the etic perspective obtained in Phase One. To do this, Phase Two has five objectives:

- Assess the perceived similarities of the leisure domain words, according to non-academics
- Measure the domain words in terms of the identified attributes
- Determine whether the attributes explain the observed similarities of the words
- Compare the perceived similarities for the academics and non-academics
- Compare the attribute ratings of the academics and non-academics

Because efforts to assess the degree to which the leisure terms used by academics exist in other cultures or languages have been virtually non-existent (Chick, 1998a), the second phase of this study will also be directed at understanding whether the leisure terms identified by researchers have more-or-less direct translations in the Mandarin Chinese and Persian languages. Mandarin Chinese and Persian were selected for this study because (a) speakers of these languages are geographically distant from one another and from speakers of English and (b) the

languages are not closely related to one another or to English. To do this, I will conduct a translation/back-translation task to identify more-or-less direct translations of the leisure domain terms in Mandarin Chinese and Persian.

## METHODS

I used cultural domain analysis techniques to investigate both the etic and emic perspective of the word “leisure” and related terms for (American) English speakers. I also assessed the cross-linguistic validity of the word “leisure” and associated terms amongst speakers of Mandarin Chinese and Persian. The overarching goal of the study was to first understand the leisure terms domain from the perspective of the etic sample and use those findings to investigate the domain amongst the three emic samples. To accomplish this, the study consisted of two phases. The goal of the first phase was to identify the content and structure of the leisure terms domain amongst North American leisure researchers and educators. Using free listing techniques, I had participants identify words and attributes (characteristics) commonly associated with the leisure domain. Based on the results of the free listing tasks, I constructed a follow-up survey using paired comparison ratings to assess the structure of the ten most common words listed for leisure terms domain. To assess the connotative meanings associated with the words in the domain, the survey also included a task in which participants rated each word in terms of five attributes (characteristics) selected from the earlier free listing task.

There were two goals for the second phase. The first goal was to assess the leisure terms domain amongst a sample of “everyday” speakers of (American) English. To aid comparisons with the etic group, I used the follow-up survey from Phase One to assess the structure of the domain for a sample of native (American) English-speaking students. (Hereafter, English is used to refer to American English.) The second goal was to investigate the extent to which the English words and the concepts to which they refer included in the leisure terms domain translate into the Chinese and Persian languages. To do this, I conducted a series of back-translation exercises with native speakers of each language (e.g., Chick, 1998a; see also, Bernard, 2002; Brislin,

1970). The results were used to begin to understand the similarities and differences in the leisure terms domain across the three languages.

Several considerations were made in the selection of Chinese and Persian. Chinese and Persian are both culturally and geographically distant from each other as well as culturally and geographically distant from English. Additionally, Chinese is unrelated to English or Persian, and while English and Persian are both Indo-European languages, they are distantly related (English is from the Germanic family while Persian is descended from the Iranian family of the Indo-Iranian branch). As a result, the three languages selected as well as the peoples who speak them are historically distant. Finally, from a practical standpoint, I knew native speakers of both languages, making it more feasible to recruit participants.

### **Procedures: Phase One**

#### ***Populating the Domain***

To identify the English words belonging to the researcher-defined leisure terms domain, I conducted an online free listing exercise with leisure researchers and educators. Participants were briefly informed about the purpose of the survey and provided an example of free listing (the complete survey is presented in Appendix A). Participants were then asked to “take a few minutes to list all of the English words you can think of whose meaning is similar or related to the word *Leisure*.” Because the field is somewhat fractured with respect to terminology (Henderson, 2010), I also asked informants to list words related to *Recreation* and *Play*. In both instances, participants were informed that they “may use any words you like regardless of whether or not you included them in the previous list.” To identify possible characteristics or attributes important in understanding the leisure terms domain, I conducted a similar free listing exercise asking participants to “list all of the characteristics or attributes you associate with the

English word *Leisure*.” As before, I repeated the task using the words *Recreation* and *Play* as prompts.

### ***Assessing the Etic Domain Structure***

Following the free listing task, I developed an online, follow-up survey to better assess the structure of the leisure terms domain amongst leisure researchers and educators. The two main tasks included in the survey were a paired comparison task to assess the similarity of the words in the domain and a series of ratings to assess degree to which the attributes (characteristics) are associated with each word. The words and attributes included were based on the results of the free listing tasks based on the frequency with which they were included in the free listing task as well as their use in the academic literature (a detailed discussion of the analysis is provided in the results section).

For a paired comparison task, the number of individual ratings is obtain by the formula  $n*(n-1)/2$ . Thus, using ten items results requires participants to make 45 separate similarity judgments. Using a list of 11 items requires 55 judgments, and a list of 12 items results in 66 judgments. A similar situation exists for the attribute scales as participants must rate each item on each scale. Thus, to limit cognitive burden and prevent participants from quitting the survey, I limited the tasks to ten words and five attributes to minimize the number of ratings participants would have to provide (45 and 50 ratings for each task, respectively).

Using the ten words selected from the leisure terms domain, I constructed a paired comparison task to collect judged similarity data. Participants were presented with a pair of randomly-selected words and asked to rate the similarity of the two words on a 7-point scale (Borgatti, 1996a). The process was then repeated for all pair combinations. Because the list contained 10 unique words, the task included 45 total paired comparison judgments. To make the

task more manageable, participants were presented with only 15 pairs at a time. The order of the pairs was selected randomly, but the pairs were presented to all participants in the same order. To obtain information on the connotative meanings of the leisure domain terms, I constructed five semantic differential rating scales based on the free listed attributes. Participants were asked to rate the degree to which they “typically associate the characteristics” of the scale with each word. The ten leisure domain words were then presented in alphabetical order. I used a seven-point rating scale for both tasks because it retains detail while limiting the effort necessary for the task (De Beuckelaer, Toonen, & Davidov, 2012).

### **Procedures: Phase Two**

#### ***Assessing the Emic Domain Structure***

I developed an online survey to examine the structure of the leisure terms domain amongst native English speakers who are not leisure researchers and educators. As with the follow-up survey in Phase One, the primary goal was to obtain information on the denotative and connotative meanings of the terms. For comparison purposes, the content and design of the survey closely followed that used in the survey distributed to academics. As with the survey used in Phase One, the two main tasks included in the survey were a paired comparison task and a series of ratings to assess degree to which the attributes (characteristics) are associated with each word. The word pairs, attribute scales, and presentation of the tasks were identical to those included in the first survey. Seven-point rating scales were also used for both tasks. Unlike the survey used in Phase One, participants were only told the survey was designed to better understand the meanings associated with words.



### ***Translating the Domain Words***

I conducted a translation/back-translation exercise to assess the extent to which the English words included in the leisure terms domain translate into the Chinese and Persian languages. In addition to the researcher-identified leisure terms from Phase One, I included nine “everyday” words. The additional words were selected based on the frequency of their use (in English) and included *family, food, friend, home, people, story, time, water, and work*. I made the decision to include only nine “everyday” items in order to limit the overall length of the translation task. The inclusion of the additional words served two purposes. The first was to partially mask the purpose of the translation exercise. The second was to provide a measure of each translator’s proficiency in translating words from English into his or her native language or from the native language into English. This was helpful for determining whether any disagreements in translations resulted from a lack of consensus in the appropriate translation or from the translator’s command of the English language. As a result, the words chosen represented both concrete items as well as more abstract concepts.

For the (initial) translation portion of the exercise, I created a translation survey including the researcher-identified leisure terms and nine “everyday” words. Participants were presented with all 19 words in the exercise and asked to translate them into their native language (i.e., Mandarin Chinese or Persian). Specifically, I asked participants to “Provide the translation you feel best captures the meaning of each word using one word or the shortest phrase possible.” To aid analysis, participants were asked to include the translations using Mandarin or Persian characters as well as English characters. For the back-translation portion of the exercise, I compiled a consensus list of translations for the 19 English words. Using these words along with any notable translations, I constructed a back-translation survey (a more detailed discussion is

provided in the results section). For this survey, I presented each word using native and English characters and asked for the appropriate English translation. As before, I asked participants to “Provide the translation you feel best captures the meaning of each word using one word or the shortest phrase possible.”

### **Sampling: Phase One**

Two samples of North American leisure researchers and educators were recruited for the first phase. Participants were recruited from the online Society of Park and Recreation Educators (SPRENET) listserv. The listserv consists primarily of leisure academics from the United States and Canada and is a popular means for communicating news to researchers and educators in the field. The first sample was recruited in the summer of 2012 to participate in the free listing task. I sent two recruitment emails asking individuals to participate in a brief questionnaire on the meaning of leisure and related terms. Two hundred seven individuals started the free listing questionnaire, but only 112 participants (54%) completed the questionnaire.

Of the individuals who provided demographic information, 68 (63%) were female and 40 (37%) were male. The mean age of participants was 47 years old ( $SD = 13.1$ ; median = 47). The youngest participant was 22 years old while the oldest participant was 100 years old. Most of the participants (90%,  $n = 97$ ) identified themselves as academics involved with teaching, research, or both. Eleven participants (10%) were practitioners. Most of the sample (69%,  $n = 75$ ) were current or retired faculty members. Twenty individuals (19%) indicated they were graduate students or post-docs at the time of the study. Consistent with the information on current job, 94 participants (91%) currently work for a college or university. Additionally, 79 participants (73%) hold a PhD, and 24 participants (22%) hold a master’s degree. No one reported having less than a bachelor’s degree. Thirty-three individuals (31%) reported an annual household income

between \$50,000 and \$75,000. Only 18 individuals (17%) reported annual income of less than \$50,000. Sixteen individuals (15%) had an annual household income of at least \$75,001 but no more than \$100,000. Eleven participants (10%) indicated an annual household income between \$100,001 and \$125,000 while 13 participants (12%) had an annual household income between \$125,001 and \$150,000. Fourteen individuals (13%) reported having an annual household income of more than \$150,000. Finally, most of the sample ( $n = 97$ , 96%) reported English as their native language. Two participants indicated Chinese as their native language while French and Bengali were each identified as the native language by one person.

Following the free listing questionnaire, a second sample of leisure researchers and educators was recruited to complete the follow-up survey, based on the results of the free listing questionnaire. Participants were recruited via email between December of 2012 and February 2013. I sent three recruitment emails asking individuals to participate in a questionnaire on the meaning of leisure and related terms. While 190 individuals followed the link to the survey, only 150 individuals provided responses to the first items. One hundred twenty-nine individuals (68% of those who opened the survey but 85% of those who provided any responses) completed the survey. Based on the available data, the demographic profile of the second sample closely resembles that of the first sample.

Of the individuals who provided demographic information, 67 (53%) were female and 59 (47%) were male. The mean age of participants was 46.5 years old ( $SD = 12.6$ ; median = 44.5). The youngest participant was 25 years old while the oldest participant was 73 years old. Most of the sample (69%,  $n = 88$ ) identified themselves as current or retired faculty members. Twenty-five individuals (20%) indicated they were graduate students or post-docs at the time of the study. Most participants (91%,  $n = 94$ ) currently work for a college or university.

Additionally, 95 participants (75%) hold a PhD, 29 participants (23%) hold a master's degree, and three individuals (2%) have a bachelor's degree. No one reported having less than a bachelor's degree. Thirty-seven individuals (30%) reported an annual household income between \$50,000 and \$75,000. Thirty-five individuals (29%) had an annual income of at least \$75,001 but no more than \$125,000. Approximately a quarter of the sample (n = 29) reported having an annual income less than \$50,000. Nine participants (7%) had an annual household income between \$125,001 and \$150,000. Thirteen individuals (11%) reported having an annual household income of more than \$150,000. Finally, most of the sample (n = 108, 90%) reported English as their native language. Five participants (4%) indicated Chinese as their native language while Spanish was identified as the native language of three individuals (3%). Russian, English and Chinese, and Turkish and Circassian were also identified as the native language of one person each. One person reported his or her native language as "Not English."

### **Sampling: Phase Two**

One sample of English-speaking individuals who were not leisure researchers or educators was recruited for the second phase. Participants were recruited from three sections of Recreation, Park and Tourism Management (RPTM) 120 offered at Pennsylvania State University. RPTM 120 was chosen for recruiting participants because it qualifies as a general education course for undergraduate students and is regularly taken by individuals who are not RPTM majors. Students taking the course are also typically diverse with respect to other demographic variables (e.g., race/ethnicity and grades). As a result, sampling from sections of RPTM 120 provided an opportunity to efficiently obtain a diverse sample of undergraduate students. Additionally, previous research on language and word meanings (Purrington, Chick, & Yarnal, 2012) suggests the content of the class does not affect how students use leisure-related

terms. Participants were recruited from two sections of RPTM 120 offered during the summer of 2013 and one section offered during the fall of 2013. For the summer sections, the class instructors informed their students of a survey being conducted on word meanings and offered extra credit for participating in the study. For the fall section, a colleague informed the students that we were conducting a study on word meanings and asked for participants. Most of the students in the two summer sections participated in the study. There were 21 completed surveys (of 22 started) from the first section and 28 completed surveys (of 29 started) from the second section. Only 26 individuals enrolled in the fall section participated in the study (of which 22 completed the survey).

Overall, 39 participants (56%) were male and 31 participants (44%) were female. The age of the participants ranged from 18 years old to 28 years old. The average age was 19.5 years old ( $SD = 2.04$ ; median = 19). About one-third of participants ( $n = 27$ , 38%) were 18 years old at the time of the study. Similarly, 33 individuals (47%) indicated they were freshmen. Fifteen individuals (21%) were sophomores and 18 (26%) were juniors. Four individuals (6%) were seniors. Thirty-nine percent of the sample ( $n = 27$ ) reported their major as Recreation, Park, and Tourism Management (RPTM;  $n = 19$ ) or Professional Golf Management (PGM;  $n = 8$ ), both of which are offered by the RPTM department. Forty-two individuals (61%) were not an RPTM or PGM major. Seven individuals (10%) were undecided while 5 (7%) identified themselves as members of the Division of Undergraduate Studies (DUS). Four individuals (6%) identified their major as either Kinesiology or Wildlife and Fisheries Sciences. A list of all reported majors, sorted by frequency, is provided in Table 1 below.

Table 1.  
Frequency of Major in Student Sample

<i>Majors</i>	<i>n</i>
RPTM	19
PGM	8
Undecided	7
DUS (Undergraduate Studies)	5
Kinesiology	4
Wildlife and Fisheries Sciences	4
HDFS	2
Psychology	2
Accounting	1
Athletic Training	1
Broadcast Journalism	1
Communication	1
Communication Sciences and Disorders	1
Economics, IST	1
engineering	1
English	1
Marketing	1
Materials Science Engineering	1
meteorology	1
Public Relations	1
Rehabilitation Science	1
Science	1
Supply Chain Management	1
Telecom	1
Turf Management	1

Participants were asked to characterize their grades the previous semester as *Below average*, *Average*, or *Above average*. They were also asked to characterize their family's household income using the same scale. Thirty-six individuals (51%) reported their grades as *Average* while 28 individuals (40%) reported their grades as *Above average*. Similarly, 39 individuals (56%) and 24 individuals (34%) classified their family's household income as *Average* or *Above average*, respectively. Ninety-four percent (n = 65) of students reported English as their native (first) language. Two students (3%) reported Chinese as their native

language while one person reported Korean and another reported Russian and Kazakh. Four of the native English speakers reported being fluent in one other language, one speaker each of Italian, Spanish, German, and Hebrew.

Two samples of native Mandarin Chinese speakers and two samples of native Persian speakers were recruited to participate in the translation/back-translation exercise. One sample from each language was tasked with translating the list of words from English into their native language. Then, the second sample was recruited to translate the consensus list of translations from the native language (i.e., Chinese or Persian) to English. All participants were recruited via snowball sampling. I recruited personal contacts whose native language was Chinese or Persian and asked those individuals to participate in the study as well as provide contact information for individuals they knew who might be willing to participate.

The first Chinese sample (English to Chinese translation) consisted of five individuals. Two participants were originally from Taiwan while three were from mainland China. All participants were graduate students, registered at Penn State at the time of the study. Three of the participants were male, and two participants were female. Three of the participants were personal acquaintances of mine. The second sample (Chinese to English translation) consisted of six individuals. Four participants were originally from Taiwan while two were originally from mainland China. Three participants possessed MBAs, one held a PhD, and two were registered doctoral students. Only one participant in the second sample was male. All of the Chinese-speaking participants were in their twenties or thirties.

Both of the Persian samples consisted of four individuals from Iran. All participants in both samples were graduate students at Penn State at the time of the study. In the first sample (English to Persian translation), all of the participants were males in their twenties or thirties. In

the second sample (Persian to English translation), the participants were all females in their twenties. One participant in the first sample was a personal acquaintance who directed me to all remaining native Persian-speaking participants.

I should note that the Chinese- and Persian-speaking participants, by being current or former graduate students at English-speaking schools, passed the Test of English as a Foreign Language (TOEFL). The translation tasks included in this study are lexical tasks requiring written but not oral skills. The inclusion of the list of “everyday” words in the translation tasks provide a way to further assess such skills as the list includes heterogeneous words ranging from concrete to abstract. Further, the goal of the translation tasks was to obtain information on semantic meanings. The present study was not conceptualized a language problem, per se. That is, the specific lexemes were used to trigger concepts and meanings associated with those concepts. While the samples for both Chinese and Persian speakers were not random and do not constitute representative samples of speakers of their respective languages, the samples obtained are useful for the purposes of the present study.

## **Data Analysis**

### ***Analyzing Free Lists***

To analyze the free lists generated in Phase One, I calculated the frequency with which items were listed for each of the prompts (three for the domain items and three for domain attributes). I then recoded the original items in order to group similar or nearly identical words as well as correct for typos. I also analyzed the lists by reviewing the part of speech of the items. For example, when reviewing the domain items, the goal was to identify nouns that could serve as synonyms for the words *leisure*, *recreation*, and *play*. Adjectives like *fun* or *active* were excluded from the analysis of domain items (nouns). Adjectives that were included in the domain



item lists were included in analyses of the attribute free lists. In addition to the part of speech, items were analyzed and recoded based on level of contrast. The goal was to have items at more-or-less the same level of specificity. If specific sports, like *baseball* or *football*, were listed, these items were recoded as *sports* because it is more similar to the level of contrast of terms like *leisure* and *recreation*. In recoding items, attention was given to not duplicating items in lists to avoid artificially inflating item frequencies. The lists were analyzed after a series of recoding. The entire procedure was repeated several times until no additional changes were needed. Following the recoding process, I assessed the final lists in terms of item frequency and shortened the lists by examining any natural “breaks” in the item frequencies. I used Anthropac 4.98 (Borgatti, 1996b) and Microsoft Excel to analyze the free list data.

### ***Analyzing Domain Structure***

In analyzing similarity data, the main goals are to identify similar groups of items (in this case, words) and to uncover attributes or characteristics that explain the observed pattern of the data (Borgatti, 1996a). To do this, I conducted a series of analytic steps. I began by calculating an item-by-item similarity matrix from the paired comparison data for each of the samples and for key subgroups within each sample. For example, I computed an overall similarity matrix for the academic sample in Phase One as well as similarity matrices for subgroups in the sample based on gender and age. I then used quadratic assignment (QAP; Hubert & Schultz, 1976; Borgatti, 2002) to test for differences between subgroups (e.g., males and females) as well as the two samples (i.e., the academic and non-academic samples).

Quadratic assignment is a permutation-based procedure that allows researcher to assess the relatedness of similarity matrices. First, the Pearson’s correlation coefficient is calculated for the two matrices being analyzed. Then, the rows and columns of one matrix are randomly

rearranged and the correlation is calculated again. The process is repeated multiple times to gauge how often the randomly permuted matrices produce correlations equal to or higher than the original, observed correlation coefficient. A low proportion (p-value) indicates the observed correlation is unlikely due to chance. I calculated all QAP analyses using 5,000 permutations.

Following the QAP analyses, I used multidimensional scaling and hierarchical cluster analysis to identify and visually represent lexical groupings of words (i.e., groups of similar terms). In hierarchical cluster analysis, items are grouped together based on their measured similarity, beginning with the two most similar items. After each new group is formed, the similarity of the resulting cluster is calculated, and the process repeats until all items form one cluster that contains all items (Borgatti, 1996a). The level at which items or clusters are grouped provides a measure of their perceived similarity.

In a related way, multidimensional scaling (MDS) is a technique for providing a visual representation of the pattern of similarities among the data (Borgatti, 1996a). Just as a traditional map is a useful guide for identifying the geographic proximities of various objects, such as cities, the resulting MDS plot (or map) can make it easier to identify item similarities and any patterns among the items. It should be noted that the orientation of the points is arbitrary and the axes do not have any inherent meaning. Additionally, while MDS maps are often represented using two dimensions, they are not limited to two dimensions. Measures of “stress” are calculated in the analysis to determine whether a two-dimensional representation is appropriate (Borgatti, 1996a; Kruskal & Wish, 1976). Stress values less than 0.15 indicate the two-dimensional solution is acceptable (Borgatti, 1996a).

Finally, I used property fitting (PROFIT; Borgatti, 1996a) to determine whether participants’ ratings of words on key attributes predict the observed pattern of the data. The

“implicit model of how similarity judgments are produced by the brain is that items have attributes...in varying degrees, and the similarity between items is a function of their similarity in scores across all attributes” (Borgatti, 1996a, p. 35). In PROFIT analyses, attribute scores are regressed onto the MDS plot to determine their fit with the data. As a result, PROFIT analyses are separate for each of the attributes although the same MDS coordinates were used in all five analyses.

Measures of statistical significance (p-values) are reported for analyses when appropriate (i.e., QAP, MANOVA, and PROFIT), and I used an alpha level equal to 0.05 to assess the statistical significance of all tests. However, because p-values are affected by the quality and size of the sample and significant p-values do not guarantee the observed results are not due to chance (Huck, 2007; Urdan, 2005; Vaske, 2008), I also reported appropriate measures of effect size and used both as a guide for interpreting the results. According to Urdan (2005, p. 66), “There are no hard and fast rules regarding the interpretation of effect sizes.” Cohen (1988) suggested the guidelines of 0.2 for a small, 0.5 for a medium, and 0.8 for a large effect when interpreting the Cohen’s *d* effect size statistic. Similar guidelines have also been suggested for other measures of effect size, although caution is warranted when interpreting effect sizes as doing so is an “imprecise science” (Urdan, 2005, p. 66). To conduct the analyses, I used Microsoft Excel to calculate the similarity matrices, Anthropac 4.98 (Borgatti, 1996b) to analyze the free lists, Stata 12.1 to conduct MANOVA tests in order to assess within- and between-group differences on attribute ratings, and UCINET 6.289 (Borgatti, Everett, & Freeman, 1999) to conduct QAP, MDS, Hierarchical Cluster, and PROFIT analyses.

### *Analyzing the Translations*

To assess the reliability of the translations, I compared each translation (either from English into the native language or *vice versa*) with the other translations for each language. The frequency of each translation provided was calculated and used to assess the overall agreement of the translation. Translator proficiency was determined based on their translations of everyday words and phrases. Participants whose translations differed markedly from their peers with respect to the everyday words were removed from the analysis. As a guideline, I omitted individuals who provided different translations for four or more of the everyday words. Agreement in the translations of everyday items was used to weight the translations of leisure-related words, if needed. The frequencies of translation, combined with translator weights, were used to produce a consensus list of translations for each step in the translation/back-translation process. Given my unfamiliarity with both Chinese and Persian characters, I used both the Chinese or Persian characters and the English characters to group translations. This proved useful as there were subtle differences in characters used by translators of the same language. For example, participants from Taiwan used slightly different pictographs than their peers from mainland China although the English characters indicated the same word or phrase.

## RESULTS

### Phase 1: Free Listing

Two separate free listing analyses were conducted, the first focusing on leisure domain words and second on attributes. As a first step in analyzing the free listed domain items, I removed the adjectives. Attribute characteristics, such as *fun*, *enjoyable*, or *choice* were excluded to obtain synonyms for the three prompts: *leisure*, *recreation*, and *play*. I then recoded the remaining items and omitted items listed by only one individual, resulting in three lists (see Table 2). More individuals provided synonyms for *leisure* (n = 138) than for *recreation* (n = 101) or *play* (n = 66). The total number of items as well as the average number of items listed per participant are highest for *leisure* (total = 370, average = 2.68). On average, individuals listed one fewer synonym for *recreation* (average = 1.76) and *play* (average = 1.52).

Participants listed the term *recreation* most often (n = 89, 64%) as a synonym for *leisure*, followed closely by the phrase *free time* (n = 81, 59%). The terms *relaxation* (n = 65, 47%) and *play* (n = 59, 43%) were also listed by nearly half of the sample. The remaining items were listed by far fewer individuals as the fifth most popular item, *rest*, was listed by only 16% of the sample (n = 22). The words listed most often by participants as synonyms for *recreation* were *leisure* and *play* (n = 55, 54%). The phrase *free time* was listed by less than half as many individuals (n = 21, 21%). The remaining terms were listed by less than ten percent of the sample. The most common word listed as a synonym for *play* was *recreation* (n = 41, 62%), followed by *leisure* (n = 28, 42%). The phrase *free time* was the third most common synonym for *play* but was listed by just over ten percent of the sample (n = 7, 11%).

Overall, each of the three terms, *leisure*, *recreation*, and *play*, were popular synonyms for the other two terms. *Free time* was also included as a popular synonym across the lists. The term

relaxation was a common synonym for leisure but less commonly included in the lists for recreation or play. Given these results, I selected ten items for future tasks. The items included were *leisure, recreation, play, free time, relaxation, nonwork, hobby, entertainment, pastime, and amusement*. As noted before, I selected ten words in order to strike a balance between having a breadth of terms and limiting the length (i.e., burden) of future tasks.

Table 2.  
Frequencies of Most Common Items Listed for *Leisure, Recreation, and Play*

<i>Leisure</i>			<i>Recreation</i>			<i>Play</i>		
<i>Item</i>	<i>f</i>	<i>%</i>	<i>Item</i>	<i>f</i>	<i>%</i>	<i>Item</i>	<i>f</i>	<i>%</i>
Recreation	89	64	Leisure	55	54	Recreation	41	62
Free Time	81	59	Play	55	54	Leisure	28	42
Relaxation	65	47	Free Time	21	21	Free Time	7	11
Play	59	43	Hobby	9	9	Nonwork	6	9
Rest	22	16	Relaxation	7	7	Exploration	4	6
Nonwork	12	9	Nonwork	6	6	Amusement	3	5
Flow	8	6	Pastime	5	5	Relaxation	3	5
Hobby	7	5	Entertainment	5	5	Frivolity	2	3
State of Mind	7	5	Rest	5	5			
Experience	6	4	Re-creation	4	4			
Entertainment	3	2	Diversion	3	3			
Escape	3	2	Renewal	3	3			
Idle Time	2	1						
My Time	2	1						
Repose	2	1						
Voluntary Activity	2	1						
Total/Average:	370	2.68		178	1.76		100	1.52

n = 138 (leisure list), 101 (recreation list), 66 (play list)

Because participants provided a considerable number of adjectives, there were, in effect, six lists of attributes to analyze, two for each prompt (*leisure, recreation, and play*). Rather than combine the lists for each prompt, I elected to analyze the lists separately. That is, I separately analyzed the items listed in response to the attributes free listing task and the items extracted

from the synonyms free listing task. After analyzed each list separately, I compared the lists to obtain the most popular items. I repeated this procedure for the lists generated by each prompt. As with the analysis of the synonym lists, the first step was to recode the items and omit items listed by only one individual. I then calculated the total frequencies across all six lists as the goal of the analysis was to identify five attributes for future analyses. The frequencies of the most common items across the six lists are presented in Table 3.

Table 3.  
Frequencies of Most Common Attributes Listed for *Leisure, Recreation, and Play*

Attribute	Total <i>f</i>	<i>Leisure</i>				<i>Recreation</i>				<i>Play</i>			
		<i>List 1<sup>a</sup></i>		<i>List 2<sup>b</sup></i>		<i>List 1<sup>a</sup></i>		<i>List 2<sup>b</sup></i>		<i>List 1<sup>a</sup></i>		<i>List 2<sup>b</sup></i>	
		<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Fun	291	25	25	48	44	38	39	47	41	56	58	77	64
Enjoyable*	146	34	34	27	25	21	21	22	19	21	22	21	18
Activity	122	2	2	12	11	25	26	62	53	2	2	19	16
Freedom*	115	28	28	35	32	2	2	4	3	18	19	28	23
Relaxing	74	55	54	0	0	7	7	5	4	7	7	0	0
Active*	62	3	3	2	2	24	24	15	13	9	9	9	8
Choice	62	26	26	15	14	7	7	7	6	4	4	3	3
Organized*	59	0	0	0	0	32	33	26	22	1	1	0	0
Social*	38	3	3	2	2	9	9	14	12	6	6	4	3
Rejuvenating	35	11	11	9	9	5	5	9	8	1	1	0	0
<i>Total/Ave.</i>		526	5.2	254	2.3	480	4.9	300	2.6	476	4.9	347	2.9
<i>n</i>		101		109		98		116		97		120	

<sup>a</sup> List 1 refers to the items provided as part of the attribute (characteristic) free listing task

<sup>b</sup> List 2 refers to the items provided in the first free listing task and omitted from that analysis

\*Attributes used in subsequent surveys

*Fun* was the most common item across the lists and the most common item for the second *leisure* list (extracted from the synonym listing task), the first *recreation* list (attribute listing task), and both of the *play* lists. The attribute *enjoyable* was listed the second most, being listed by approximately twenty percent of participants in each list (and 34% of participants in the first

leisure list). *Activity* was the third most common item across lists, but it was listed more frequently for *recreation* than the other prompts. The item *active* was also a commonly listed characteristic for *recreation* but not *leisure* or *play*. The items *relaxing* and *choice* were typically included in the *leisure* characteristics lists but not the lists for *recreation* or *play*. The item *organized* was listed almost exclusively for the term *recreation*, but antonyms for *organized*, such as *unorganized* or *spontaneous*, were listed for *play* and *leisure*. Given these data, I selected the attributes *active*, *enjoyable*, *freedom*, *organized*, and *social* as well as their opposites for inclusion in later tasks. Two factors were considered in my decision to include enjoyable but not fun. First, they are very similar characteristics and including both would be redundant. Second, because fun is often thought of with respect to the domain items (and listed as a synonym by many participants), its use might bias participants or result in less variation in ratings or both.

### **Phase 1: Semantic Structure of Academic Sample**

Before analyzing the overall structural qualities of the leisure terms domain for the academic (SPRENET) sample, I tested for systematic differences. Specifically, I assessed whether the similarity data obtained differed by gender or age. The quadratic assignment results indicated that the similarity matrices for males ( $n = 59$ ) and females ( $n = 67$ ) correlated at 0.886 ( $p < .001$ , 5,000 permutations). To test for differences by age, I split the sample at the median age (45.5) resulting in one group of individuals under 45 years of age ( $n = 61$ ) and one group of individuals over the age of 44 ( $n = 61$ ). The results of the quadratic assignment procedure indicate the similarity matrices correlate at 0.915 ( $p < .001$ , 5,000 permutations). Given the high correlations, I make the assumption that there are no differences in the sample with respect to gender or age. I used the entire sample ( $n = 121$ ) in subsequent analyses of the leisure domain amongst leisure researchers and educators.



To examine the lexical relationships among the words, I used hierarchical cluster analysis to examine word similarities. The graphical results of the hierarchical cluster analysis (average linkage method) are presented in Figure 1. The distance to the right of where the terms join indicates their similarity, relative to the similarity of the other items. *Entertainment* and *amusement* are the first terms to join, followed separately by *nonwork* and *free time* and *pastime* and *hobby*. Then, the items *play* and *recreation* form a fourth dyad of terms followed by *leisure* and *relaxation*. At this point, the “leisure,” “free time,” and “play” dyads form a six-word cluster. Then, the “pastime” dyad joins the larger cluster followed by the “entertainment” dyad. While the items entertainment and amusement are the two items to group, the resulting dyad does not join with any other items or groups until all other items have joined one cluster. These results suggest there is at least one main cluster of items and one or two dyads of items less closely related to the “core” cluster.

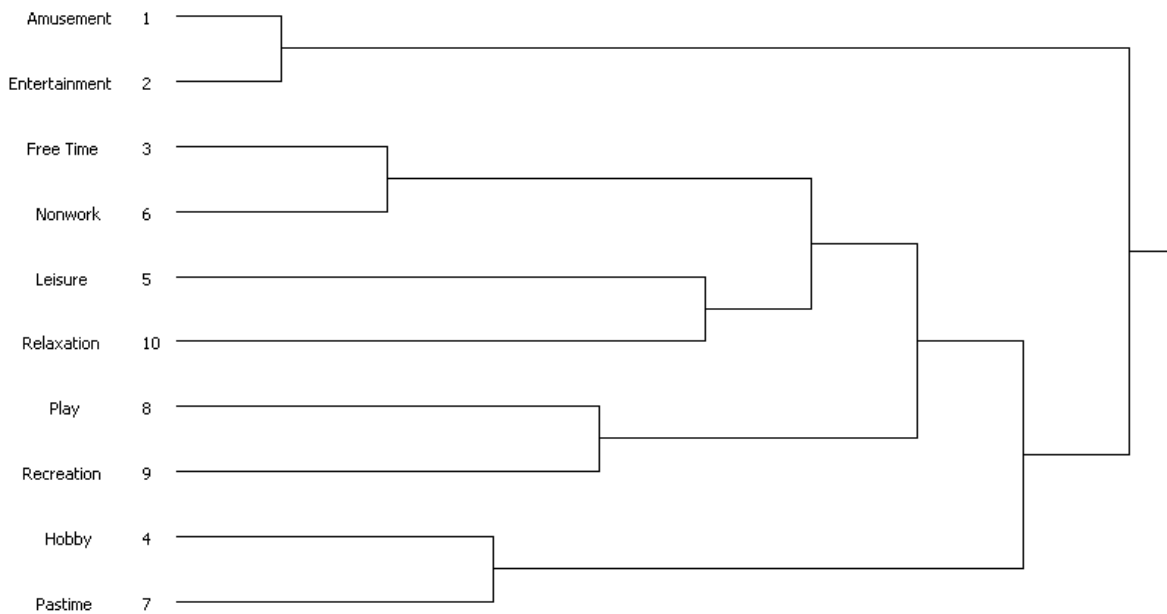


Figure 1. Hierarchical Cluster Dendrogram of Academic (SPRENET) Sample

The multidimensional scaling (MDS) results are similar to the results obtained using cluster analysis. The two-dimensional representation of the data (see Figure 2 below) is an acceptable solution in this case (Kruskal Stress = .115). Visual inspection of the plot suggests that the item *leisure* is in the middle of a cluster containing the items *recreation*, *play*, *free time*, *nonwork*, *relaxation*, *pastime*, and *hobby*. The items *entertainment* and *amusement* form a more distantly-related dyad at the far right of the map.

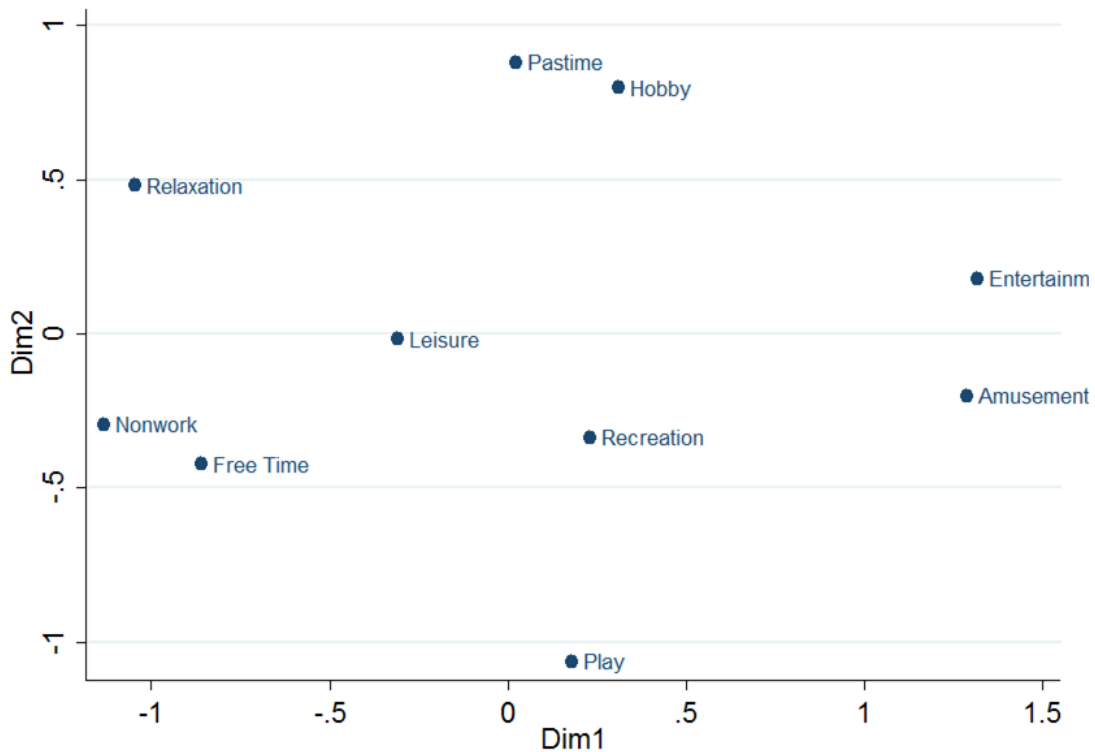


Figure 2. Multidimensional Scaling Solution for Academic (SPRENET) Sample

To examine the connotative meanings of the leisure words, I analyzed academics' ratings of the ten terms for each of the five attributes. Descriptive statistics for the ten terms on each attribute scale are presented in Table 4. For the dull-enjoyable attribute, the mean rating for all

items is above the midpoint of the seven-point scale. The word *nonwork* received the lowest rating on this scale (mean = 4.61, SD = 1.53) followed by *pastime* (mean = 4.75, SD = 1.46). *Play* was rated as the most “enjoyable” (mean = 6.14, SD = 1.17). *Leisure* and *recreation* is tied for the second-highest rating (mean = 6.02, SD = 1.13 and 1.18, respectively). Mean ratings for the terms on the conformity-freedom attribute are all above the midpoint, with two exceptions. *Entertainment* received the lowest rating (mean = 3.40, SD = 1.58) and *amusement* received the second-lowest rating on this scale (mean = 3.98, SD = 1.63) with a mean score just below the midpoint. *Leisure* received the highest rating on the conformity-freedom scale (mean = 5.86, SD = 1.26) followed closely by *free time* (mean = 5.85, SD 1.17) and *relaxation* (mean = 5.84, SD = 1.22).

Table 4.  
Academic (SPRENET) Sample Means and Standard Deviations for the Terms on Each Attribute

Term	Dull-Enjoyable		Spontaneous-Organized		Active-Passive		Social-Solitary		Conformity-Freedom	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Amusement	5.26	1.48	3.96	1.59	4.55	1.39	3.36	1.24	3.98	1.63
Entertainment	5.40	1.34	4.86	1.43	4.95	1.48	3.15	1.43	3.40	1.58
Free Time	5.31	1.39	2.91	1.50	3.98	1.14	4.39	1.11	5.85	1.17
Hobby	5.55	1.30	5.17	1.34	2.90	1.16	4.65	1.25	4.73	1.52
Leisure	6.02	1.13	3.33	1.43	3.61	1.32	3.80	1.12	5.86	1.26
Nonwork	4.61	1.53	3.46	1.41	4.44	1.25	4.34	1.09	5.03	1.40
Pastime	4.75	1.46	4.05	1.34	3.95	1.24	4.15	1.04	4.81	1.35
Play	6.14	1.17	2.50	1.59	2.22	1.13	2.73	1.26	5.54	1.49
Recreation	6.02	1.18	4.48	1.51	2.17	1.05	2.83	1.13	4.42	1.77
Relaxation	5.72	1.49	2.82	1.30	4.83	1.48	5.18	1.25	5.84	1.22

All words rated on a 7-point scale.

1 = “dull,” “spontaneous,” “active,” “social,” or “conformity”

7 = “enjoyable,” “organized,” “passive,” “solitary,” or “freedom”

*n* = 127

Compared to ratings on the dull-enjoyable and conformity-freedom attributes, the mean scores on the other three attributes are not as high and are more balanced around the midpoint.

The word *hobby* received the highest mean score on the spontaneous-organized attribute (mean = 5.17, SD = 1.34). *Entertainment* (mean = 4.86, SD = 1.43), *recreation* (mean = 4.48, SD = 1.51), and *pastime* (mean = 4.05, SD = 1.34) also received mean ratings on the “organized” side of the scale. *Play* was rated as the most “spontaneous” term (mean = 2.5, SD = 1.59), followed by *relaxation* (mean = 2.82, SD = 1.30) and *free time* (mean = 2.91, SD = 1.50). According to the data, *recreation* is the most “active” (mean = 2.17, SD = 1.05) followed closely by *play* (mean = 2.22, SD = 1.13). *Entertainment* (mean = 4.95, SD = 1.48) and *relaxation* (mean = 4.83, SD = 1.48) received the highest mean ratings on the active-passive attribute. On the social-solitary attribute, *relaxation* has the highest mean score (mean = 5.18, SD = 1.25). *Hobby* has the second-highest mean rating (mean = 4.65, SD = 1.25) followed by *free time* (mean = 4.39, SD = 1.11) and *nonwork* (mean = 4.34, SD = 1.09). *Play* (mean = 2.73, SD = 1.26) and *recreation* (mean = 2.83, SD = 1.13) have the most “social” mean ratings of the ten domain words.

I used property fitting (PROFIT) to further examine the underlying relationships in the data. Each of the five attributes (dull-enjoyable; spontaneous-organized; active-passive; social-solitary; conformity-freedom) was regressed separately onto the MDS coordinates of the ten domain words. The results of the PROFIT analysis are presented in Table 5. With respect to connotative meaning, the coordinate points account for the most variation in the social-solitary ratings ( $R^2 = 0.812$ ;  $p = .004$ ), followed by the conformity-freedom ratings ( $R^2 = 0.699$ ;  $p = .017$ ) and the spontaneous-organized scores ( $R^2 = 0.640$ ;  $p = .034$ ). More than half of the variance is accounted for in each attribute scale. The PROFIT analyses for dull-enjoyable ( $R^2 = 0.151$ ;  $p = .552$ ) and active-passive ( $R^2 = 0.126$ ;  $p = .619$ ) are not significant and account for very little of the observed variation.

Table 5.  
PROFIT Results for Academic (SPRENET) Sample

<i>Attribute</i>	<i>R</i>	<i>R</i> <sup>2</sup>	<i>p</i>
Dull-Enjoyable	0.389	0.151	0.552
Spontaneous-Organized	0.800	0.640	0.034
Active-Passive	0.355	0.126	0.619
Social-Solitary	0.901	0.812	0.004
Conformity-Freedom	0.836	0.699	0.017

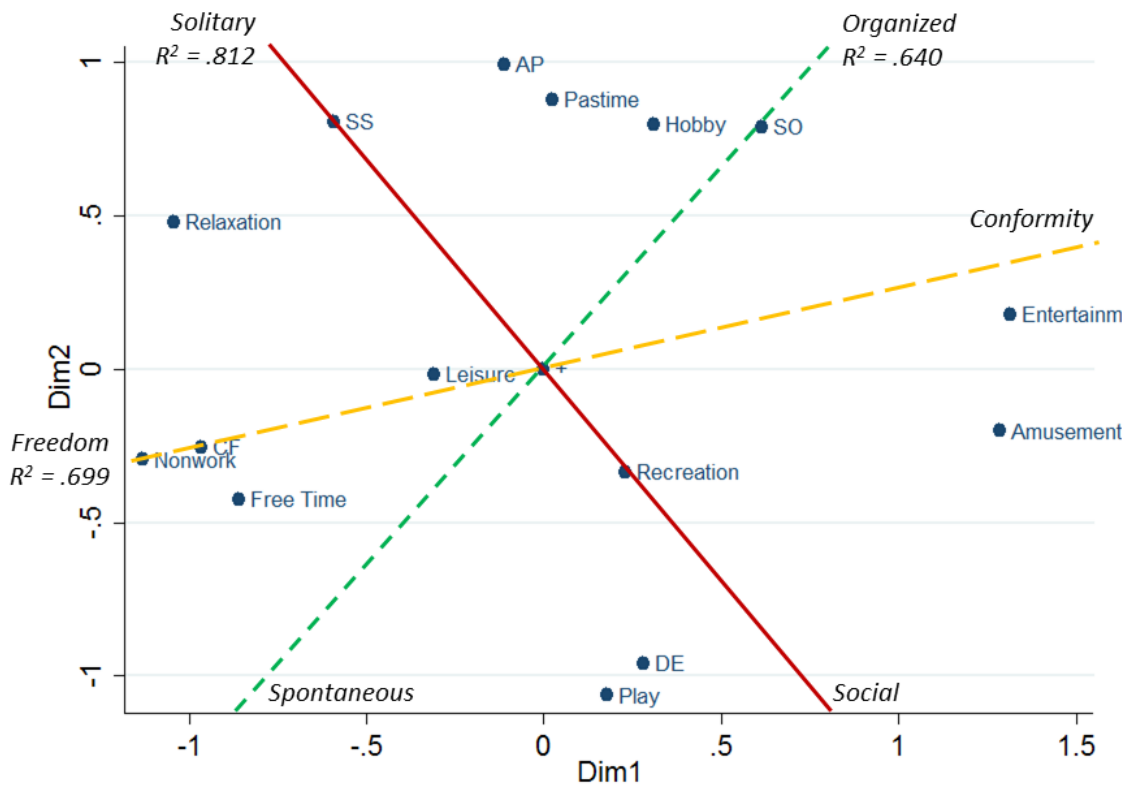


Figure 3. Multidimensional Scaling Solution with PROFIT Regression Lines for Academic (SPRENET) Sample

The MDS map with PROFIT regression lines, one for each of the three statistically significant attributes, is presented in Figure 3. The social-solitary (red solid) line runs from the top left to the bottom right of the map. The spontaneous-organized (green dotted) line is nearly perpendicular to the social-solitary line. The conformity-freedom (orange dashed) line splits the

other two dimensions. It is the most horizontal and somewhat closer to the spontaneous-organized line. According to these results, items in the upper-left of the map are more solitary than items in the lower-right of the map. Meanwhile, items in the lower-left are more associated with spontaneity and freedom than items in the upper-right of the map.

### **Phase 2: Semantic Structure of Non-Academic Sample**

Before analyzing the overall structural qualities of the leisure terms domain for the student (non-academic) sample, I analyzed the similarity data for systematic differences by gender and major. The similarity matrices for males ( $n = 39$ ) and females ( $n = 31$ ) correlated at 0.898 ( $p < .001$ , 5,000 permutations). To test for differences by major, I split the sample into two groups: students enrolled in majors offered by the Department of Recreation, Park, and Tourism ( $n = 27$ ) and those enrolled in other majors ( $n = 42$ ). The results of the quadratic assignment procedure indicate the similarity matrices correlate at 0.855 ( $p < .001$ , 5,000 permutations). Given the high correlations, I make the assumption that there are no differences in the sample with respect to gender or major. In subsequent analyses of the non-academic (student) sample, I used the pooled dataset to construct the similarity matrix ( $n = 71$ ).

As in my analysis of the academic sample previously, I used hierarchical cluster analysis to examine word similarities for the student sample. Figure 4 shows the graphical results of the hierarchical cluster analysis (average linkage method). *Entertainment* and *amusement* are the first terms to join. Next, three additional dyads form as the items *leisure* and *relaxation*, *free time* and *nonwork*, and *play* and *recreation* separately group. At this point, the “leisure” and “free time” dyads join to form a cluster. Next, the item *hobby* joins with the “play” dyad, followed by the “amusement” dyad. The “leisure” and “play” clusters then form a single group before being joined by the item *pastime*. Pastime joins only with the larger group after all other items have

been grouped. These results suggest there is one large cluster composed of two groups and that *pastime* is distantly related to the other items, at least for the present sample of students.

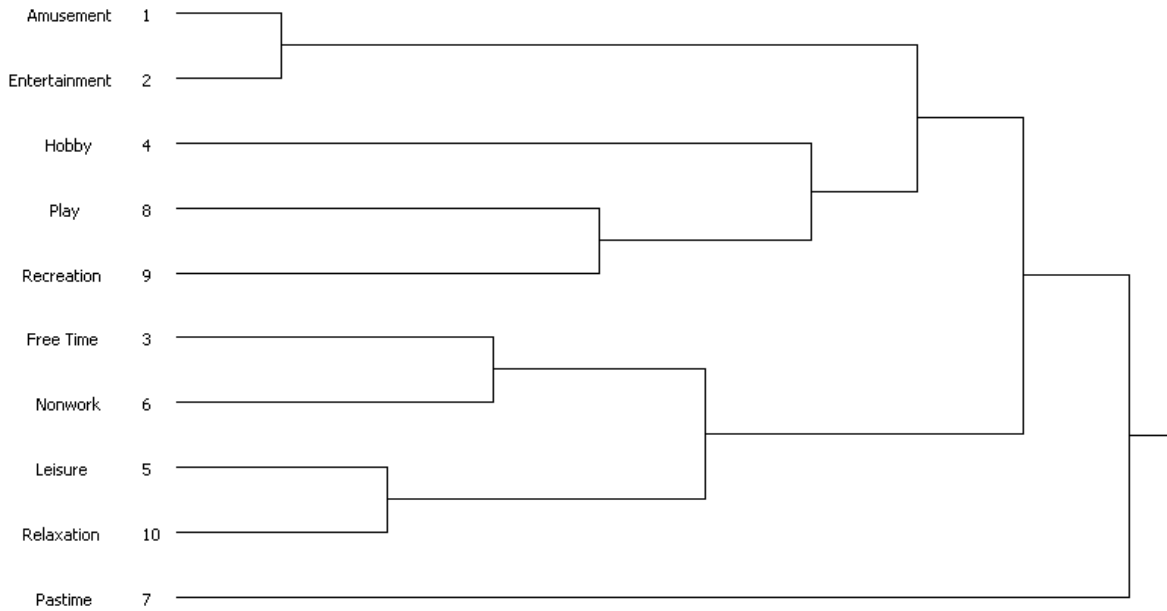


Figure 4. Hierarchical Cluster Dendrogram of Non-Academic (Student) Sample

A two-dimensional multidimensional scaling solution (see Figure 5) is an acceptable representation for the data (Kruskal Stress = .099). The results provide a similar picture of the data compared with the cluster analysis results. Visual inspection of the plot suggests that there is one large cluster of items, located right of the center. Further, this cluster is composed of two smaller groups of items, one group composed of the items *leisure*, *free time*, *nonwork*, and *relaxation* while the other group consists of the items *play*, *recreation*, *hobby*, *entertainment*, and *amusement*. The item *pastime* is located to the far left of the map.

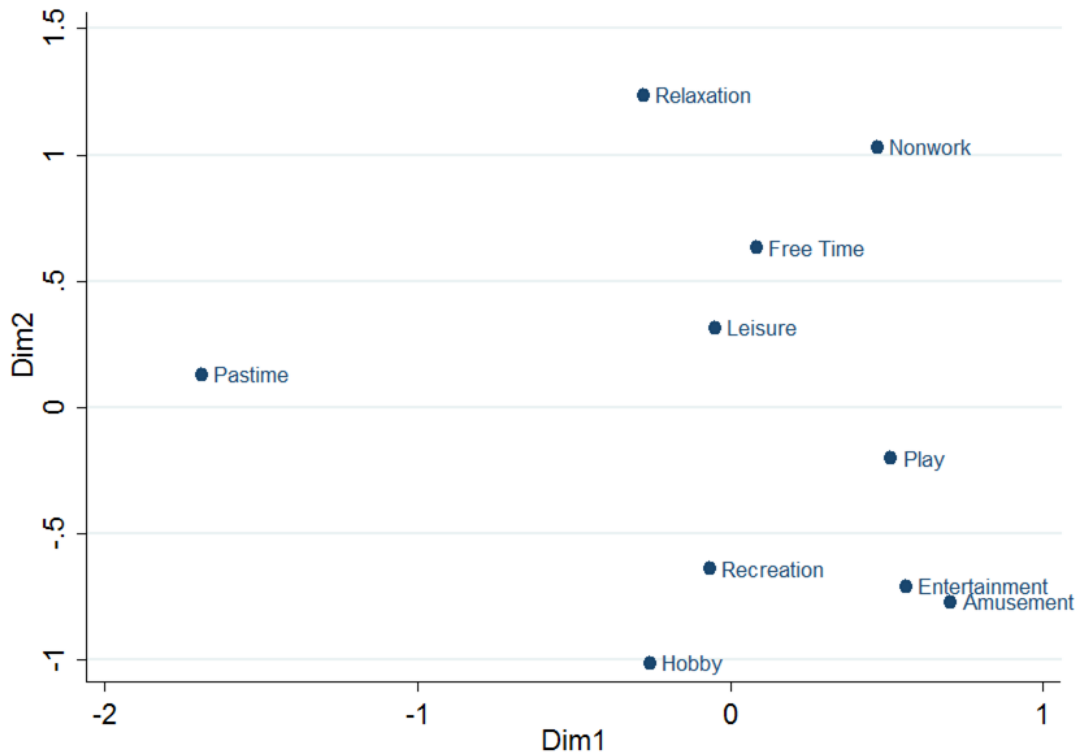


Figure 5. Multidimensional Scaling Solution for Non-Academic (Student) Sample

To examine the connotative meanings of the leisure words and assess whether those meanings might predict the observed relationships among the terms, I analyzed the students' ratings of the ten terms and used property fitting (PROFIT) for each of the five attributes. The means and standard deviations for the ten terms on each attribute scale are presented in Table 6. Students' mean scores of all domain terms are above the scale midpoint for the dull-enjoyable and conformity-freedom attributes. For the dull-enjoyable attribute, the word *play* has the highest mean score (mean = 6.44, SD = 0.73) followed by *entertainment* (mean = 6.35, SD = 0.97) and *relaxation* (mean = 6.32, SD = 1.13). *Pastime* has the lowest mean rating on this scale (mean = 5.17, SD = 1.41) followed by *free time* (mean = 5.75, SD = 1.41) and *nonwork* (mean = 5.77, SD = 1.34). On the conformity-freedom scale, *relaxation* received the highest mean rating (mean = 6.00, SD = 1.37), and *free time* received the second-highest mean score for this scale (mean =



5.86, SD = 1.35). *Recreation* received the lowest mean rating on the conformity-freedom scale (mean = 4.23, SD = 2.06) followed by *pastime* (mean = 4.39, SD 1.56) and *hobby* (mean = 4.66, SD = 1.65).

Table 6.  
Non-Academic (Student) Sample Means and Standard Deviations for the Terms on Each Attribute

Term	Dull-Enjoyable		Spontaneous-Organized		Active-Passive		Social-Solitary		Conformity-Freedom	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Amusement	6.18	1.13	3.53	1.75	3.51	1.86	2.71	1.48	4.73	1.79
Entertainment	6.35	0.97	4.17	1.69	4.17	1.89	2.99	1.44	4.93	1.80
Free Time	5.75	1.41	3.20	1.79	3.86	1.64	4.13	1.74	5.86	1.35
Hobby	6.06	1.03	4.91	1.70	2.71	1.48	3.69	1.78	4.66	1.65
Leisure	6.08	1.07	3.53	1.75	3.83	1.63	3.61	1.55	5.43	1.50
Nonwork	5.77	1.34	3.94	1.89	4.44	1.63	4.24	1.58	5.29	1.57
Pastime	5.17	1.41	4.09	1.66	4.04	1.62	3.76	1.52	4.39	1.56
Play	6.44	0.73	2.89	1.77	1.79	1.09	1.80	1.17	5.44	1.68
Recreation	6.20	0.99	4.87	1.82	2.09	1.27	2.07	1.38	4.23	2.05
Relaxation	6.32	1.13	3.14	1.87	5.49	1.72	5.50	1.64	6.00	1.37

All words rated on a 7-point scale.

1 = “dull,” “spontaneous,” “active,” “social,” or “conformity”

7 = “enjoyable,” “organized,” “passive,” “solitary,” or “freedom”

*n* = 71

Mean ratings for domain words are less extreme and more balanced around the scale midpoints for the other three attributes. The word *hobby* received the highest mean score on the spontaneous-organized attribute (mean = 4.91, SD = 1.70) followed by *recreation* (mean = 4.87, SD = 1.82). *Play* has the lowest mean score for the scale (mean = 2.89, SD = 1.77), followed by *relaxation* (mean = 3.14, SD = 1.87) and *free time* (mean = 3.20, SD = 1.79). On the active-passive attribute scale, *relaxation* has the highest mean score (mean = 5.49, SD = 1.72). *Nonwork* has the second-highest mean rating (mean = 4.44, SD = 1.63) followed by *entertainment* (mean = 4.17, SD = 1.89). *Play* (mean = 1.79, SD = 1.09), *recreation* (mean = 2.09, SD = 1.27), and *hobby* (mean = 2.71, SD = 1.48) received the lowest (most “active”) mean

ratings on the active-passive attribute. With respect to the social-solitary attribute, *relaxation* has the highest (most “solitary”) mean score (mean = 5.50, SD = 1.64). *Nonwork* has the second-highest mean rating (mean = 4.24, 1.58). *Play* (mean = 1.80, SD = 1.17) and *recreation* (mean = 2.07, SD = 1.38) have the lowest (most “social”) mean ratings of the ten domain words followed by *amusement* (mean = 2.71, SD = 1.48) and *entertainment* (mean = 2.99, SD = 1.44).

The results of the PROFIT regressions for the five attributes (dull-enjoyable; spontaneous-organized; active-passive; social-solitary; conformity-freedom) onto the MDS coordinates of the ten domain words are presented in Table 7. According to these results, the coordinate points account for the most variation in the conformity-freedom ratings ( $R^2 = 0.697$ ;  $p = .014$ ), followed by the social-solitary ratings ( $R^2 = 0.582$ ;  $p = .045$ ). The PROFIT results indicate coordinate points are not significantly related to the ratings for the dull-enjoyable ( $R^2 = 0.545$ ;  $p = .069$ ), active-passive ( $R^2 = 0.459$ ;  $p = .121$ ), and spontaneous-organized ( $R^2 = 0.428$ ;  $p = .134$ ) scores. However, it is worth noting that approximately half of the observed variation in the attribute ratings is accounted for by the domain item coordinates.

Table 7.  
PROFIT Results for Non-Academic (Student) Sample

<i>Attribute</i>	<i>R</i>	<i>R</i> <sup>2</sup>	<i>p</i>
Dull-Enjoyable	0.738	0.545	0.069
Spontaneous-Organized	0.654	0.428	0.134
Active-Passive	0.678	0.459	0.121
Social-Solitary	0.763	0.582	0.045
Conformity-Freedom	0.835	0.697	0.014

The MDS map with PROFIT regression lines for each of the statistically significant attributes is presented in Figure 6. The conformity-freedom (red solid) line generally runs from the top right to the bottom left of the map. The social-solitary (orange dashed) line runs from the

top middle to the bottom right of the map. The two regression lines form dimensions that are somewhat, but clearly not, perpendicular to one another. According to these results, items in the upper-right of the map are more associated with freedom than items in the lower-left of the map. Meanwhile, items in the lower-left are more social than items in the upper-middle of the map.

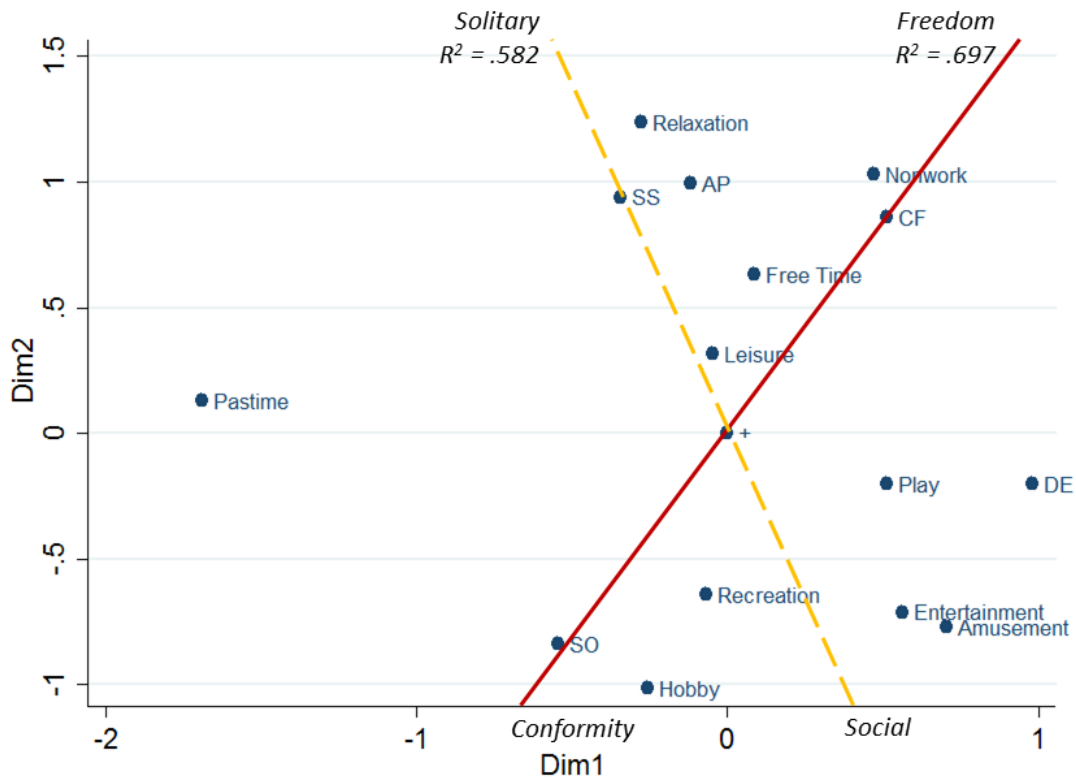


Figure 6. Multidimensional Scaling Solution with PROFIT Regression Lines for Non-Academic (Student) Sample

### Phase 2: Semantic Structure Comparisons of Academic and Non-Academic Samples

To compare the academic (SPRENET) and non-academic (student) samples, I analyzed the similarity data using quadratic assignment. I also compared the results of the cluster analyses presented previously. The similarity matrices for academics (SPRENET sample;  $n = 121$ ) and non-academics (student sample;  $n = 71$ ) correlates at 0.655 ( $p < .001$ , 5,000 permutations). Of the

domain words, the cluster and MDS analyses presented previously suggest pastime is treated the most different between the two samples. In the academic sample, pastime grouped with hobby before joining the larger “core” cluster. And it joins the main cluster before the terms amusement and recreation. However, in the student sample, pastime does not form a dyad with any other term and does not join any word or group until all other items have joined together.

Because of the apparent difference in the treatment of pastime, I conducted a second quadratic assignment test of the two similarity matrices omitting pastime from both samples. The results indicate the similarity matrices correlate at 0.750 ( $p < .001$ , 5,000 permutations). Removing pastime from the analysis appears to improve the observed correlation of the matrices, but the matrices are not as similar as any of the within-group tests conducted for either the academic or student samples (correlation coefficients all above 0.850).

I also compared the attribute ratings for the academic (SPRENET) and non-academic (student) samples. Because of the high number of comparisons being conducted, I first performed a multivariate analysis of variance (MANOVA) for each of the attribute scales. The results suggest there are statistically significant differences, adjusted for multiple comparisons, for the dull-enjoyable ( $p < .001$ ,  $F = 6.62$ ,  $df1 = 10$ ,  $df2 = 184$ ), spontaneous-organized ( $p < .032$ ,  $F = 2.04$ ,  $df1 = 10$ ,  $df2 = 178$ ), active-passive ( $p < .001$ ,  $F = 4.43$ ,  $df1 = 10$ ,  $df2 = 182$ ), social-solitary ( $p < .001$ ,  $F = 6.51$ ,  $df1 = 10$ ,  $df2 = 175$ ), and conformity-freedom ( $p < .001$ ,  $F = 7.11$ ,  $df1 = 10$ ,  $df2 = 175$ ) attributes. Therefore, I conducted follow-up t-tests to assess the mean ratings of each term on each attribute (see Tables 8 thru 12).

According to the results presented in Table 8 for the dull-enjoyable attribute ratings, academics and students differed in their ratings of all but three terms (*leisure*, *recreation*, and *pastime*). T-test results for the domain terms *nonwork* ( $p < .001$ ,  $d = .742$ ), *entertainment* ( $p <$

.001,  $d = .733$ ), and *amusement* ( $p < .001$ ,  $d = .643$ ) suggest the observed differences are statistically significant and have large effect sizes. The effect sizes for the terms *relaxation* ( $p = .003$ ,  $d = .429$ ), *hobby* ( $p = .006$ ,  $d = .408$ ), *free time* ( $p = .036$ ,  $d = .310$ ), and *play* ( $p = .030$ ,  $d = .284$ ) suggest that while the differences are statistically significant, the differences are only moderately important.

Table 8.  
Academic and Student Ratings of the Terms for Dull-Enjoyable

	<i>Academics</i>		<i>Students</i>		<i>p</i>	<i>Cohen's d</i>
	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>		
Amusement	5.26	1.48	6.18	1.13	< .001	.643
Entertainment	5.40	1.34	6.35	0.97	< .001	.733
Free Time	5.31	1.39	5.75	1.41	.036	.310
Hobby	5.55	1.30	6.06	1.03	.006	.408
Leisure	6.02	1.13	6.08	1.07	.709	.055
Nonwork	4.61	1.53	5.77	1.34	< .001	.742
Pastime	4.75	1.46	5.17	1.41	.052	.286
Play	6.14	1.17	6.44	0.73	.030	.284
Recreation	6.02	1.18	6.20	0.99	.297	.155
Relaxation	5.72	1.49	6.32	1.13	.003	.429

All words rated on a 7-point scale: 1 = “dull,” 7 = “enjoyable”  
 $n = 195$

The t-test results for the domain terms on the spontaneous-organized attribute presented in Table 9 indicate ratings differ between academics and students for only two words. Academics appear to rate *entertainment* ( $p = .003$ ,  $d = .440$ ) as somewhat more “organized” than students. Students, meanwhile, provided slightly higher scores, on average, than academics for the term *nonwork* ( $p = .046$ ,  $d = 2.97$ ). However, the effect sizes suggest the observed differences are modest, at best. Academics and non-academics provided statistically significant different ratings for four domain terms with respect to the active-passive attribute scale (see Table 10). Academics and students provided different mean ratings for the term *amusement* ( $p < .001$ ), and the effect size ( $d = .629$ ) suggests the difference is important. Mean ratings also differ for the

terms *entertainment* ( $p = .002$ ,  $d = .463$ ), *relaxation* ( $p = .005$ ,  $d = .412$ ), and *play* ( $p = 0.10$ ,  $d = .383$ ). The effect sizes suggest the differences for these terms are moderately important.

Academics provided higher (more “passive”) mean scores for all of the terms except for the item *relaxation*.

Table 9.  
Academic and Student Ratings of the Terms for Spontaneous-Organized

	<i>Academics</i>		<i>Students</i>		<i>p</i>	<i>Cohen's d</i>
	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>		
Amusement	3.96	1.59	3.53	1.75	.079	.261
Entertainment	4.86	1.43	4.17	1.69	.003	.440
Free Time	2.91	1.50	3.20	1.79	.233	.178
Hobby	5.17	1.34	4.91	1.70	.251	.173
Leisure	3.33	1.43	3.53	1.75	.400	.126
Nonwork	3.46	1.41	3.94	1.89	.046	.297
Pastime	4.05	1.34	4.09	1.66	.861	.026
Play	2.50	1.59	2.89	1.77	.115	.235
Recreation	4.48	1.51	4.87	1.82	.107	.240
Relaxation	2.82	1.30	3.14	1.87	.155	.212

All words rated on a 7-point scale: 1 = “spontaneous,” 7 = “organized”  
 $n = 189$

According to the t-test results presented in Table 11, academics and non-academics differ in their ratings of five domain terms on the social-solitary attribute. The results indicate that differences in the mean scores provided by academics and non-academics are statistically significant for the terms *play* ( $p < .001$ ,  $d = .716$ ), *recreation*, ( $p < .001$ ,  $d = .628$ ) and *hobby* ( $p < .001$ ,  $d = .596$ ). The effect sizes suggest these differences are also important. Mean scores are also significantly different for the terms *amusement* ( $p = .001$ ,  $d = .473$ ) and *pastime* ( $p = .033$ ,  $d = .317$ ), although the importance of these differences is modest. For all five terms, academics provided higher (more “solitary”) mean scores than did non-academics. Academics and non-academics provided statistically significant different mean ratings on the conformity-freedom attribute scale for four domain terms (see Table 12). Non-academics provided higher mean

scores for the terms *entertainment* ( $p < .001$ ,  $d = 840$ ) and *amusement* ( $p = .004$ ,  $d = 431$ ) than did academics. Conversely, academics provided higher mean scores for the terms *leisure* ( $p = .034$ ,  $d = .315$ ) and *pastime* ( $p = .049$ ,  $d = .293$ ). However, the effect sizes suggest that while the different mean ratings for entertainment are important, the other differences are only moderately important.

Table 10.  
Academic and Student Ratings of the Terms for Active-Passive

	<i>Academics</i>		<i>Students</i>		<i>p</i>	<i>Cohen's d</i>
	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>		
Amusement	4.55	1.39	3.51	1.86	< .001	.629
Entertainment	4.95	1.48	4.17	1.89	.002	.463
Free Time	3.98	1.14	3.86	1.64	.549	.089
Hobby	2.90	1.16	2.71	1.48	.334	.144
Leisure	3.61	1.32	3.83	1.63	.313	.150
Nonwork	4.44	1.25	4.44	1.63	.979	.004
Pastime	3.95	1.24	4.04	1.62	.665	.065
Play	2.22	1.13	1.79	1.09	.010	.383
Recreation	2.17	1.05	2.09	1.27	.615	.075
Relaxation	4.83	1.48	5.49	1.72	.005	.412

All words rated on a 7-point scale: 1 = "active," 7 = "passive"  
 $n = 193$

Table 11.  
Academic and Student Ratings of the Terms for Social-Solitary

	<i>Academics</i>		<i>Students</i>		<i>p</i>	<i>Cohen's d</i>
	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>		
Amusement	3.36	1.24	2.71	1.48	.001	.473
Entertainment	3.15	1.43	2.99	1.44	.444	.114
Free Time	4.39	1.11	4.13	1.74	.207	.188
Hobby	4.65	1.25	3.69	1.78	< .001	.628
Leisure	3.80	1.12	3.61	1.55	.332	.146
Nonwork	4.34	1.09	4.24	1.58	.573	.085
Pastime	4.15	1.04	3.76	1.52	.033	.317
Play	2.73	1.26	1.80	1.17	< .001	.716
Recreation	2.83	1.13	2.07	1.38	< .001	.596
Relaxation	5.18	1.25	5.50	1.64	.128	.227

All words rated on a 7-point scale: 1 = "social," 7 = "solitary"  
 $n = 186$

Table 12.  
Academic and Student Ratings of the Terms for Conformity-Freedom

	<i>Academics</i>		<i>Students</i>		<i>p</i>	<i>Cohen's d</i>
	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>		
Amusement	3.98	1.63	4.73	1.79	.004	.431
Entertainment	3.40	1.58	4.93	1.80	< .001	.840
Free Time	5.85	1.17	5.86	1.35	.970	.006
Hobby	4.73	1.52	4.66	1.65	.770	.044
Leisure	5.86	1.26	5.43	1.50	.034	.315
Nonwork	5.03	1.40	5.29	1.57	.250	.173
Pastime	4.81	1.35	4.39	1.56	.049	.293
Play	5.54	1.49	5.44	1.68	.690	.060
Recreation	4.42	1.77	4.23	2.05	.493	.103
Relaxation	5.84	1.22	6.00	1.37	.408	.124

All words rated on a 7-point scale: 1 = “conformity,” 7 = “freedom”  
*n* = 186

A comparison of the PROFIT analyses for the academic and non-academic samples (see Table 5 and Table 7, respectively) indicate that the most observed variation is accounted for in the attributes scales social-solitary and conformity-freedom for both samples. The coordinate points were also a significant predictor of the attribute scale spontaneous-organized in the academic sample ( $p = .034$ ,  $R^2 = .640$ ) but not in the non-academic sample ( $p = .134$ ,  $R^2 = .428$ ). Additionally, while the attributes dull-enjoyable and active-passive were not statistically significant related to the coordinate points for either sample, more of the variance in the attribute scales is accounted for in the student sample than in the academic sample (dull-enjoyable: academic  $R^2 = .151$ , student  $R^2 = .545$ ; active-passive: academic  $R^2 = .126$ , student  $R^2 = .459$ ).

### **Phase 2: Translating Leisure Terms into Mandarin Chinese**

As a first step in assessing the translations of words from English to Chinese, I calculated the frequency with which each English word resulted in a given Chinese word or phrase. The frequency of each Chinese translation (both Mandarin and English characters) is presented in Table 13. I then examined the translations for the “everyday” words and looked for any systematic disagreements in the translations across the participants. Participants provided the



same translations for all of the “everyday” items, except *people*. However, follow-up discussions with participants revealed that the differences are a result of some individuals provided the plural form of *people* (*Ren Men*) while others provided the singular form (*Ren*). Participants also revealed that differences with respect to the Mandarin pictograph characters are a result of different representation systems used historically and in mainland China and Taiwan. These differences aside, participants provided the same translation for the English words *home*, *friend*, *work*, *story*, *water*, *food*, *time*, *relaxation*, *entertainment*, and *people*. Participants provided nearly universal translations for the terms *pastime*, *family*, and *leisure*. There was less agreement on how to best translate the terms *hobby*, *recreation*, *play*, *nonwork*, *amusement*, and *free time*.

To better understand the disagreements in translations, I contacted the participants and asked them to explain the differences in meaning as well as provide definitions for some Chinese words. As a result, *Ai Hao* was selected as a translation for *hobby* because it is more similar to the meaning of the English word and *Shi Hao* is used more to refer to an addiction. With respect to the English word *recreation*, participants noted that *Yu Le* is more “comprehensive” and “more usual and common” than *You Qi*. For the English word *play*, participants indicated that *Wanshua* is used more for children and *Wan* is “suitable for all ages.” Additionally, *Wanle* means to “have fun” rather than *play*. Follow-up interactions revealed that *Lequ* means to “have fun” or “enjoy doing something,” both of which could be similar to the meaning of *amusement*. Participants also suggested both *Kong Xian* and *Xianxia* were suitable translations for *free time*. Given the data at hand, I identified 21 words or phrases to be included in the back-translation task (see Table 14). As a result of the disagreement in translations, I included alternative translations for the English words *amusement*, *free time*, and *nonwork*.

Table 13.  
Translations of English Words into Mandarin Chinese

	<i>n</i>	<i>Chinese Characters</i>	<i>English Characters</i>	<i>n</i>	<i>Chinese Characters</i>	<i>English Characters</i>	<i>n</i>	<i>Chinese Characters</i>	<i>English Characters</i>
Home	5	家	Jia						
Friend	5	朋友	Peng You						
Work	5	工作	Gong Zuo						
Story	5	故事	Gu Shi						
Water	5	水	Shui						
Food	5	食物	Shi Wu						
<b>Pastime</b>	4	消遣	Xiao Qian	1	闲暇	Xia xia			
Family	4	家庭	Jia Ting	1	家族	Jia Zu			
<b>Relaxation</b>	3	放松	Fang Song	2	放鬆	Fang Song			
Time	3	时间	Shi Jian	2	時間	Shi Jian			
<b>Entertainment</b>	3	娱乐	Yu Le	2	娛樂	Yu Le			
<b>Leisure</b>	3	休闲	Xiu Xian	1	休閒	Xiu Xian	1	閒暇	Xianxia
<b>Hobby</b>	3	爱好	Ai Hao	2	嗜好	Shi Hao			
People	2	人	Ren	2	人们	Ren Men	1	人們	Ren Men
<b>Recreation</b>	2	娱乐	Yu Le	1	娛樂	Yu Le	1	游憩	You Qi
<b>Play</b>	2	玩	Wan	1	玩耍	Wanshua	1	玩樂	Wanle
<b>Nonwork</b>	2	不工作	Bu Gong zuo	1	非工作	Fei Gong Zuo	1	非工作的	Feigongzuode
<b>Amusement</b>	1	乐趣	Lequ	1	樂趣	Lequ	1	趣味	Qu Wei
<b>Free Time</b>	1	空闲	Kongxian	1	空閒	Kong Xian	1	闲暇	Xianxia

Words in bold are the ten leisure-related terms used in Phase One  
*n* = 5

The frequencies of each English translation for the Mandarin Chinese words and phrases included in the back-translation task are presented in Table 15. All but one of the “everyday” words received universal translations, and all resulting translations match the original English word. The word *Gong Zuo* (included as a translation of *work*) was translated as *work*, *work/job*, or *job*, which mean approximately the same thing in English depending on the context. The

words *Xiu xian* (for *leisure*), *Wan* (for *play*), and *Yu Le* (for *entertainment*) received nearly universal agreement when translated from Chinese to English. In contrast to the comments provided by participants in the first round, all but one of the participants in the back-translation task translated *Yu Le* as *entertainment* and not *recreation*.

Table 14.  
Consensus Translations of English Words into Chinese (Mandarin)

	<i>Chinese Characters</i>	<i>English Characters</i>
<b>Amusement</b> <sup>1</sup>	乐趣	Lequ
<b>Entertainment</b> <sup>2</sup>	娱乐	Yu Le
Family	家庭	Jia Ting
Food	食物	Shi Wu
<b>Free Time</b> <sup>1</sup>	空闲	Kongxian
Friend	朋友	Peng You
<b>Hobby</b>	爱好	Ai Hao
Home	家	Jia
<b>Leisure</b>	休闲	Xiu Xian
<b>Nonwork</b> <sup>3</sup>	不工作	Bu Gong zuo
<b>Nonwork</b> <sup>3</sup>	非工作	Fei Gong Zuo
<b>Pastime</b>	消遣	Xiao Qian
People	人们	Ren Men
<b>Play</b>	玩	Wan
<b>Recreation</b> <sup>2</sup>	娱乐	Yu Le
<b>Relaxation</b>	放松	Fang Song
Story	故事	Gu Shi
Time	时间	Shi Jian
Water	水	Shui
Work	工作	Gong Zuo

<sup>1</sup> Given the low agreement, subsequent tasks included 趣味 (Qu Wei) for Amusement and 闲暇 (Xianxia) for Free Time

<sup>2</sup> The translation task resulted in the same word (娱乐 Yu Le)

<sup>3</sup> Both 不工作 (Bu Gong zuo) and 非工作 (Fei Gong Zuo) were included as translations for Nonwork as it was impossible to choose only one given the data at hand

Table 15.  
Translation of Chinese Words into English

<i>English Word*</i>	<i>Consensus Translations</i>			<i>English Translation</i>	<i>n</i>	<i>English Translation</i>	<i>n</i>	<i>English Translation</i>
Home	家	Jia	6	Home				
Friend	朋友	Peng You	6	Friend				
Story	故事	Gu Shi	6	Story				
Water	水	Shui	6	Water				
Food	食物	Shi Wu	6	Food				
Time	时间	Shi Jian	6	Time				
Family	家庭	Jia Ting	6	Family				
People	人们	Ren Men	6	People				
<b>Free Time</b>	空闲	Kongxian	5	Free Time	1	Free		
<b>Leisure</b>	休闲	Xiu Xian	5	Leisure	1	Casual Activity		
<b>Play</b>	玩	Wan	5	Play	1	Have Fun		
<b>Entertainment</b>	娱乐	Yu Le	5	Entertainment	1	Recreation		
<b>Amusement</b>	乐趣	Lequ	5	Fun	1	Pleasure		
<b>Relaxation</b>	放松	Fang Song	4	Relax	2	Relaxation		
Work	工作	Gong Zuo	3	Work	2	Job/Work	1	Job
<b>Nonwork</b>	非工作	Fei Gong Zuo	2	Nonwork	1	Not Work	1	Not Job
<b>Nonwork</b>	不工作	Bu Gong zuo	3	Don't Work	1	Not To Work	1	No Work
<b>Amusement</b>	趣味	Qu Wei	3	Fun	2	Interesting	1	Enjoyment
<b>Free Time</b>	闲暇	Xianxia	3	Free Time	1	Leisure Time	1	Leisure
<b>Pastime</b>	消遣	Xiao Qian	3	Recreation	1	Leisure	1	Pastime
<b>Hobby</b>	爱好	Ai Hao	3	Hobby	1	Interests	1	Favorite

n = 6

Both Chinese translations for *amusement*, *Lequ* and *Qu Wei*, were translated into English as *fun*, suggesting there may not be a direct translation for the word in Mandarin. *Kongxian* (for *free time*) was translated into English as *free time* by all but one participant. Similarly, *Xianxia* (for *free time*) was translated as *free time* by three individuals and as *leisure time* by one person. Both words appear to closely match the English phrase *free time*. The Chinese phrase *Fei Gong*

*Zuo* (for *nonwork*) was translated into English as *nonwork* (n = 2), *not work* (n = 1), not job (n = 1), or *not work-related* (n = 1) suggesting it closely matches the meaning of the English word. The phrase *Bu Gong Zuo* received similar translations into English, such as *don't work* (n = 3) and *not to work* (n = 1). However, *Bu Gong Zuo* appears to be used more as an adjective than as a noun.

Overall, the phrase *Ai Hao* appears to serve as a good translation for the English word *hobby*. *Fang Song* (for *relaxation*) was translated into English as either *relaxation* (n = 2) or *relax* (n = 4), suggesting it is similar to relaxation. However, it is unclear whether *Fang Song* is best thought of as a noun, a verb, or both. The Chinese translation for *pastime*, *Xiao Qian*, was translated most often as *recreation* (n = 3). Other translations for *Xiao Qian* included *leisure* (n = 1), *hobby* (n = 1), and *pastime* (n = 1).

Table 16.  
Consensus Results of the Translation/Back-Translation Task in Chinese

	<i>Into Chinese</i>		<i>Back Into English</i>
<b>Amusement</b>	乐趣	Lequ	Fun
<b>Entertainment</b>	娱乐	Yu Le	Entertainment
<b>Free Time</b>	空闲	Kongxian	Free Time
<b>Hobby</b>	爱好	Ai Hao	Hobby
<b>Leisure</b>	休闲	Xiu Xian	Leisure
<b>Nonwork</b>	非工作	Fei Gong Zuo	Non-Work
<b>Nonwork</b>	不工作	Bu Gong zuo	Don't Work
<b>Pastime</b>	消遣	Xiao Qian	Recreation
<b>Play</b>	玩	Wan	Play
<b>Recreation</b>	娱乐	Yu Le	Entertainment
<b>Relaxation</b>	放松	Fang Song	Relax

Consensus results of the translation/back-translation task in Mandarin Chinese are provided for the leisure domain terms in Table 16. Overall, there was less agreement in translations of the leisure terms than for the “everyday” terms. The English words *amusement*, *pastime*, and *recreation* appear to have presented the most difficulty for the translators. Each of these words was translated into Chinese, but the original English words were not returned at the end of the task. It is worth noting that recreation was translated into Chinese as entertainment (Yu Le), and the translation for pastime (Xiao Qian) was translated into English as recreation.

### **Phase 2: Translating Leisure Terms into Persian**

The frequencies of each Persian translation (both Persian and English characters) are presented in Table 17. Participants provided the same translations for the “everyday” items *friend*, *work*, *story*, *water*, *food*, *time*, *family*, *people*, and *hobby*. The word *home* was the only “everyday” item not universally translated, but all but one participant agreed on a Persian translation for it. The pattern of translations also suggested there were no systematic disagreements in the translations across participants. Participants provided nearly universal translations for several of the leisure domain terms, including *free time*, *relaxation*, *nonwork*, *entertainment*, *recreation*, and *amusement* (see Table 17). There was less agreement on how to best translate the terms *hobby*, *recreation*, *play*, *nonwork*, *amusement*, and *free time*. *Play* was translated as either *Bazi* (n = 2) or *Bazi kardan* (n = 2). Participants agreed least on how best to translate *leisure* and *pastime*. It should be noted that, despite the agreement on individual translations, several words resulted in the same translation. The Persian words *Sargarmi* and *Tafrih* were both used as translations for many of the leisure domain terms. *Sargarmi* was often the consensus translation in those cases.

Table 17.  
Translations of English Words into Persian

	<i>n</i>	<i>Persian Characters</i>	<i>English Characters</i>	<i>n</i>	<i>Persian Characters</i>	<i>English Characters</i>
Friend	4	دوست	Doost			
Work	4	کار	Kar			
Story	4	داستان	Dastan			
Water	4	آب	Aab			
Time	4	زمان	Zaman			
Family	4	خانواده	Khanevadeh			
<b>Hobby</b>	4	سرگرمی	Sargarmi			
Food	4	غذا	Ghaza			
People	4	مردم	Mardom			
Home	3	خانه	Khaneh	1	خونه	Khoone
<b>Free Time</b>	3	وقت آزاد	Vaghte Azad	1	وقت فراغت	Vaght e faraghat
<b>Relaxation</b>	3	استراحت	Esterahat	1	آسودگی	Asoodegi
<b>Nonwork</b>	3	غیرکاری	Gheire-Kari	1	خراب	Kharab
<b>Entertainment</b>	3	سرگرمی	Sargarmi	1	تفریح	Tafrih
<b>Recreation</b>	3	تفریح	Tafrih	1	سرگرمی	Sargarmi
<b>Amusement</b>	3	سرگرمی	Sargarmi	1	تفریح	Tafrih
<b>Play</b>	2	بازی	Bazi	2	بازی کردن	Bazi kardan
<b>Leisure</b>	2	اوقات فراغت	Oghate Feraghat	1	فراغت	Faraghat
<b>Pastime</b>	2	سرگرمی	Sargarmi	1	تفریح	Tafrih

*n* = 4

As in the analysis of the Chinese translation task, I contacted the participants gain a better understanding of the word meanings and select the best translations for the back-translation task. Participants pointed out that both *Bazi kardan* and *Bazi* mean *play*, but *Bazi kardan* is a verb whereas *Bazi* is a noun. Participants indicated that *Sargarmi* means *entertainment* or “something that is entertaining.” One person could not distinguish between *Sargarmi* and *Tafrih*. However, two individuals noted that *Tafrih* is more fun. One person suggested *Sargarmi* is “more for the

purpose of passing time” than *Tafrih*. One participant described *Faraghat* as meaning leisure while another indicated the direct translation of *Faraghat* means “freedom.” The consensus was that the phrase *Oghate Faraghat* translates as leisure time. Based on the results of the translation task and the follow-up discussions, I identified 19 words or phrases to be included in the back-translation task (see Table 18). As a result of the duplicate use of *Sargarmi* and *Tafrih* to translate terms, I included alternative translations for the leisure domain words, including *Vaghte faraghat*, *Faraghat*, and *Asoodegi*.

One participant was excluded from the analysis of the back-translation task. The participant appeared to provide meanings or other short descriptions of the words rather than translations. None of responses provided by the individual matched those provided by his or her peers. Of the remaining sample, the back-translation frequencies of each English translation for the Persian words and phrases are presented in Table 19. All but two of the “everyday” words received universal translations, and all resulting translations match the original English word. The word *Kar* (included as a translation of *work*) was translated as *work* (n = 3) or *job* (n = 1) while *Khaneh* (included for *home*) was translated as either *home* (n = 2) or *house* (n = 2).

All participants translated the phrase *Vaghte Azad* as *free time*. *Oghate Faraghat* was translated by most participants as *leisure* (n = 3). Similarly, all but one participant translated *Tafrih* as *recreation* while one person translated it as *fun*. As suggested by the follow up discussions, most participants (n = 3) translated *Sargarmi* as *entertainment*. While one person translated *Bazi* as *play*, most participants translated it as *game*. *Esterahat* (included for *relaxation*) was translated as either *rest* (n = 2) or *resting* (n = 2). The alternative translation for *relaxation* included in the task, *Asoodegi*, was translated as *comfort* (n = 2) or *calm* (n = 1). *Esterahat* is most likely the better translation, as suggested by the results of the translation task,



but it is unclear how closely it matches *relaxation* given it did not directly translate back into English. The phrase *Gheire-Kari* is a potentially close match to the English word *nonwork* as it was translated into English as *non-working* (n = 2) or *non-business* (n = 1).

Table 18.  
Consensus Translations of English Words into Persian

	<i>Persian Characters</i>	<i>English Characters</i>
<b>Amusement<sup>1</sup></b>	سرگرمی	Sargarmi
<b>Entertainment<sup>1</sup></b>	سرگرمی	Sargarmi
Family	خانواده	Khanevadeh
Food	غذا	Ghaza
<b>Free Time</b>	وقت آزاد	Vaghte Azad
Friend	دوست	Doost
<b>Hobby<sup>1</sup></b>	سرگرمی	Sargarmi
Home	خانه	Khaneh
<b>Leisure</b>	اوقات فراغت	Oghate Feraghat
<b>Nonwork</b>	غیرکاری	Gheire-Kari
<b>Pastime<sup>1</sup></b>	سرگرمی	Sargarmi
People	مردم	Mardom
<b>Play</b>	بازی	Bazi
<b>Recreation</b>	تفریح	Tafrih
<b>Relaxation</b>	استراحت	Esterahat
Story	داستان	Dastan
Time	زمان	Zaman
Water	آب	Aab
Work	کار	Kar

<sup>1</sup> The translation task resulted in the same word سرگرمی (Sargarmi)

Table 19.  
Translation of Persian Words to English

<i>English Word*</i>	<i>Consensus Translation</i>	<i>n</i>	<i>English Translation</i>	<i>n</i>	<i>English Translation</i>	<i>n</i>	<i>English Translation</i>
Friend	دوست	Doost	4	Friend			
Story	داستان	Dastan	4	Story			
Water	آب	Aab	4	Water			
Time	زمان	Zaman	4	Time			
Family	خانواده	Khanevadeh	4	Family			
Food	غذا	Ghaza	4	Food			
People	مردم	Mardom	4	People			
<b>Free Time</b>	وقت آزاد	Vaghte Azad	4	Free Time			
Work	کار	Kar	3	Work	1	Job	
<b>Leisure</b>	اوقات فراغت	Oghate Feraghat	3	Leisure	1	Leisure Time	
<b>Play</b>	بازی	Bazi	3	Game	1	Play	
(Several)	سرگرمی	Sargarmi	3	Entertainment	1	Entertain	
<b>Recreation</b>	تفریح	Tafrih	3	Recreation	1	Fun	
Home	خانه	Khaneh	2	Home	2	House	
<b>Relaxation</b>	استراحت	Esterahat	2	Rest	2	Resting	
<b>Free Time</b>	وقت فراغت	Vaght e faraghat	2	Leisure	1	Leisure Time	1 Time of Leisure
<b>Nonwork</b>	غیرکاری	Gheire-Kari	2	Non-Working	1	Non-Business	1 Off
<b>Leisure</b>	فراغت	Faraghat	2	Leisure	1	Recreation	1 Relief
<b>Relaxation</b>	آسودگی	Asoodegi	2	Comfort	1	Calm	1 Relaxing

*n* = 4

Table 20 contains the leisure domain term consensus results of the translation/back-translation task in Persian. While there was high agreement for the translation of some leisure domain words (e.g., entertainment, free time, leisure, and recreation) there was less agreement in translations of the leisure terms than for the “everyday” terms. It appears that the English terms *amusement*, *hobby*, and *pastime* do not have separate words in Persian with which to denote them. Rather, they are all lumped together with the word *Sargarmi*, which participants translate

as *entertainment*. The English words play and relaxation also presented challenges for the translators. While each of these words was translated into Persian, the original English words were not returned at the end of the task.

Table 20.  
Consensus Results of the Translation/Back-Translation Task in Persian

	<i>Into Persian</i>		<i>Back Into English</i>
Amusement	سرگرمی	Sargarmi	Entertainment
Entertainment	سرگرمی	Sargarmi	Entertainment
Free Time	وقت آزاد	Vaghte Azad	Free Time
Hobby	سرگرمی	Sargarmi	Entertainment
Leisure	اوقات فراغت	Oghate Feraghat	Leisure
Nonwork	غیرکاری	Gheire-Kari	Non-Working
Pastime	سرگرمی	Sargarmi	Entertainment
Play	بازی	Bazi	Game
Recreation	تفریح	Tafrih	Recreation
Relaxation	استراحت	Esterahat	Rest/Resting

## DISCUSSION

The results of the free listing task presented in this paper suggest that North American leisure researchers and educators generally agree on the words related to *leisure*. When asked to provide synonyms for the word *leisure*, a clear “core” group of items emerged that included the words *recreation*, *free time*, *play*, and *relaxation*. Similarly, core groups of synonyms emerged for *recreation* and *play*, and the resulting terms are largely consistent across the lists.

Interestingly, while words or phrases consistent with recent literature on the definition of leisure, such as *flow*, *state of mind*, and *experience*, were listed as synonyms for *leisure*, the proportion of participants who listed these items was relatively low. This would suggest that, while such terms enter academics’ minds when thinking of *leisure*, they are not as prevalent as the literature would suggest they should be. However, the results appear to support the literature with respect to a lack of consensus in leisure definitions. The proportion of individuals who listed any particular term is not as high as one might expect, suggesting there is some disagreement about how best to describe *leisure* in terms of related words.

The results of the hierarchical cluster and multidimensional scaling analyses are consistent with the free listing. The words *leisure*, *recreation*, *play*, *free time*, *nonwork*, and *relaxation* appear to be closely related to one another. The words *pastime* and *hobby* are also similar to these terms. However, the words *entertainment* and *amusement* appear to be less related to the other terms in the study. This finding may be reflective of a generally tendency for individuals in the field to hold strong value judgments about leisure as a good, positive force in people’s lives. They tend to dislike activities they consider as wasteful or unhealthy. For example, watching television often has a negative connotation, and it is a popular activity done for *entertainment* or *amusement* in the United States. Academics’ ratings of *entertainment* and

*amusement* suggest these terms are most associated with conformity, which could be interpreted as contradictory to the notion that leisure activities should be productive.

The results suggest that North American leisure researchers and educators think of *leisure* as being fun or enjoyable. This appears to be consistent with general sentiments about this domain. Educators often point out the importance of providing enjoyable experiences for participants. In their minds, *leisure* also provides freedom. This, too, is consistent with recent thinking in the field. In the past few decades, researchers have examined the possible role of leisure in providing individuals opportunities for overcoming disabilities or social conventions. Leisure has been considered a possible outlet for challenging the status quo. Interestingly, *leisure* received mean ratings near the scale midpoint for the spontaneous-organized, active-passive, and social-solitary attributes. It is possible that these scores reflect the use of *leisure* as an overarching term for the field. Leisure has historically been used to refer to the general phenomenon of free time behavior or experiences, which can be diverse. As a result, it might be expected that leisure would be rated near the midpoint of these scales.

Researchers and educators consider *recreation* to be more organized than *leisure* or *play*. *Recreation* and *play* are both considered to be active and social. These findings are to be expected given the literature on both topics. *Recreation* is generally used to refer to activities that require planning or are structured, such as backpacking or sports. In contrast, *play* is frequently considered something that cannot be planned. Individuals do not plan to play, even though adults may plan “play dates” for their children. Similar to *recreation*, academics view *hobby* as an organized, social activity. This finding is consistent with research on serious leisure (Stebbins, 1992), which is marked by the presence of organization and social pressures, and hobbies are recreation activities in which individuals tend to invest more time and energy.

Academics' ratings of the terms with respect to the social-solitary, conformity-freedom, and spontaneous-organized are related to the multidimensional scaling pattern, although to varying degrees. The most variation was accounted for in the social-solitary attribute scale, suggesting it is an important dimension with respect to the perceived similarities of the words. The conformity-freedom and spontaneous-organized attributes appear to also be important considerations as both dimensions run nearly perpendicular to the latter. The attribute scales dull-enjoyable and active-passive do not appear to be related to the patterning of leisure domain words for the current sample of leisure academics. Considering the generally "enjoyable" ratings for the terms, it is possible that there is simply not enough variation to account for the differences in perceived similarity. It is interesting that the active-passive attribute was not related to the perceived similarities of the terms, especially considering common descriptions for the terms and importance in a similar study (Purrington, Chick, & Yarnal, 2012).

The results presented in this paper suggest there are similarities in the leisure terms domain structure for academics and non-academics. Non-academics appear to view all of the terms as a single group consisting of two subgroups. One subgroup contains the terms *leisure*, *free time*, *nonwork*, and *relaxation*. The other subgroup includes *recreation*, *play*, *hobby*, *entertainment*, and *amusement*. Unlike the academic sample, the non-academics tend to view *pastime* as least related to the other terms. Unlike the other terms, *pastime* is a word young adults, who comprised the sample of non-academics, are less likely to encounter on a given day, much less use themselves. In my own conversations with students, the word *pastime* is rarely, if ever, used by them.

The academic and non-academic samples appear to share several similarities in their views of the terms. Like the academics, students think of the leisure domain terms as

representing things that are enjoyable. This would seem to be largely consistent with the way people discuss the terms and related concepts in everyday conversation. *Leisure* and *free time* were also rated in the middle of the spontaneous-organized, active-passive, and social-solitary attributes. Of course, the terms are somewhat vague and nondescript, meaning they can be used to refer to or used to categorize a variety of activities. As would be expected, non-academics consider the concepts underlying the domain words as opportunities for freedom. This is consistent with the academic sample and with how individuals tend to use the terms, in general. After all, if work, school, or family present obligations, leisure and free time are opportunities to do what one wants. Also consistent with the academics, non-academics consider *recreation* to be more organized while both *recreation* and *play* are active and social.

The terms *entertainment* and *amusement* appear to be viewed differently by the academics and non-academics. While the non-academics included them in “core” grouping of terms, the words were on the periphery of the domain for the academics. This difference is also evident in the attribute ratings provided by both groups. Academics and non-academics consistently provided different scores for *entertainment* and *amusement* on the attributes. Academics consider *entertainment* and *amusement* as more dull, more passive, and indicative of more conformity compared to the non-academics. Overall, these findings support the idea that academics maintain somewhat more negative connotations for these two terms. However, this view is not apparently shared by the non-academics.

The different ratings for *entertainment* and *amusement* account for many of the significant differences between academics and non-academics. However, the findings suggest academics view the domain terms as more dull than non-academics. In addition to *entertainment* and *amusement*, academics provided more dull ratings for *nonwork*, *hobby*, *free time*, and

*relaxation*. Academics also viewed the terms *play*, *recreation*, and *hobby* as more solitary when compared to the non-academics. At present, it is unclear what factors account for these differences. It is possible that these results are a product of the age differences of the samples. Social networks often decline as individuals age resulting in more solitary (or simply less social) participation in leisure activities. Similarly, it is possible that the observed differences are a product of how the two samples participate in activities they would describe using the terms. The hobbies or recreational pursuits of students may be more socially-oriented than the academics. The effect sizes for most differences are moderate, at best, suggesting that the statistically significant differences are potentially not important. As a result, the differences could be a product of response tendencies for the groups as the academics tended to provide less extreme responses on the dull-enjoyable and social-solitary attributes.

Consistent with the academic sample, the conformity-freedom and social-solitary attributes are significantly related to the perceived similarities of the domain terms. Further, the proportion of the variance accounted for in the conformity-freedom attribute (about two-thirds) is about the same in both samples. However, in the non-academic sample, the social-solitary attribute appears to be a less important characteristic. It is interesting that, in terms of the variance accounted for, the word similarities account for approximately half of the variation of the non-significant attributes. While the findings were not statistically significant, they cannot be dismissed at this point. The dull-enjoyable attribute is almost significantly related to the MDS coordinate points. Studies using samples with more statistical power should be conducted.

The PROFIT results for both the academics and non-academics suggest that the conformity-freedom and spontaneous-organized attributes may be tapping the same, or nearly the same, conceptual dimension. In both analyses, the regression lines are located near one another.



In fact, in the non-academic results, the regression lines are nearly on top of one another. Even if the attributes are not conceptually the same in the minds of participants, they may be closely related to one another.

The results of the present study appear to be similar to the results obtained by Parr & Lashua (2004). Participants in both studies included similar items, such as passive, relaxation, enjoyment, fun, activities, choice, freedom, experience, in approximately the same frequencies in the free listing tasks. In both studies, the items “state of mind,” and “experience” were included by a small portion of the sample while “relaxation,” “enjoyable/enjoyment,” and “fun” were more commonly listed by participants. In both studies tend to view leisure as an opportunity for freedom (but not total freedom). Some differences between the studies may be a result of different populations surveyed. The present study was aimed at a North American sample of leisure academics (largely university professors and graduate students) while Parr & Lashua interviewed professionals from Ohio.

Native speakers of Mandarin Chinese and Persian did not appear to have any difficulty with the translation/back-translation task. No participant claimed a word could not be translated from English or back into English. This would suggest that, regardless of the existence of a direct translation for each English word, the concepts represented by the words are present in both languages. The results of the translation/back-translation task also suggest that, with respect to the words studied, Mandarin Chinese has a larger vocabulary of leisure domain terms than does the Persian language. Perhaps as a result, Persian translators tended to agree with one another more often.

Chinese translators provided unique translations for most of the leisure domain terms. When participants provided translations that did not match those provided by peers, the word

they provided was not included as an alternative for other terms. When translation agreement was low, more than one alternative was provided. The results of the translation/back-translation task suggest that there are not direct translations in Chinese for the English terms *amusement* and *pastime*. Participants also appear to have had difficulty translating the word *recreation* into Chinese, although the back-translation task resulted in a translation for it.

Persian translators translated several English terms using the same word. They also provided fewer alternatives for the English words. Persian translators provided the same word (*Sargarmi*) as a translation for several English words. Additionally, if an alternative was provided, it was frequently the same one (*Tafrih*). Interestingly, *Sargarmi* translates best as *entertainment* and *Tafrih* as *recreation*. So, unlike the Chinese speakers, Persian translators appear to have been subsuming the English words *hobby*, *amusement*, and *pastime* into either the *entertainment* or *recreation* categories. The English word *play* also presented challenges. The translation/back-translation task resulted in the word *game*. In the first round of translations, participants provided both verbs and nouns as translations for *play*. Since, in English, *play* can be both a noun and a verb, as in to “play a game,” it is possible that this resulted in miscommunication about the best translation into Persian. Clearly, additional research is needed before conclusions can be reached.

## LIMITATIONS AND FUTURE RESEARCH

One of the major limitations of the present study is the sampling approach and resulting samples. I recruited leisure researchers and educators by emailing a national listserv (SPRENET). No probabilistic methods were employed to identify specific individuals in the listserv or the population of North American leisure researchers or educators. Using the listserv was a matter of convenience, and the resulting sample was self-selected. In fact, participants self-selected to join the listserv and self-selected to participate in the study. While the demographics from both academic samples suggest they may approximate the population, there is no way to assess whether or not the samples are good representations of the populations.

Arguably, the use of a student sample is a worse approximation for a non-academic, English speaking population. Students are unlikely to represent older individuals. The use of a student sample from a large university located in the Eastern United States, also presents challenges. The students are likely not representative of the population of American college students, much less older or less educated individuals in the population at large. The sample is useful as first step to begin examining the nature of leisure meanings, but it is far from a definitive examination. Future research on leisure domain terms for both academics and non-academics should focus on using probabilistic sampling approaches. Larger samples than those obtained in the present study would also improve statistical power. Combined, these measures may help address some of the issues identified in the results of this paper.

An obvious issue with the translation samples is their size. While smaller samples are necessary to properly analyze the data, they can provide anomalous results. While it is true that smaller samples are acceptable when the domain is agreed upon, it is unclear if the translation of leisure terms is something speakers of Mandarin Chinese and Persian agree on. At the moment, it

is merely an assumption. An additional concern is that, by virtue of being bilingual and at an American university, the translators may not be representative of their native languages. While the samples are not representative, they provide an important first look at the cross-linguistic nature of leisure terms. One way to address these issues would be to conduct follow up studies with native speakers of Chinese and Persian examining the meanings of the obtained translations.

The study also suffers from the decision to base the study of non-academic and non-English samples on the results obtained from the academic samples. While this allowed for a more streamlined study and made it easier to make future comparisons with the academics, it is possible that the words and characteristics obtained from the academics are not the most appropriate choices for the other groups. Similarly, the relationships among the words identified through the multidimensional scaling maps and hierarchical cluster analyses depend on the words included in the analyses. The results obtained in the present study may differ from similar studies using other sets of words. As a result, future research should employ free listing techniques with all of the groups to identify both words and attributes that may be important.

Future studies investigating the meanings among leisure-related words should employ other techniques, including in-depth interviews as well as other techniques for obtaining cognitive data (e.g., pile sorts, triadic comparisons). In-depth interviews may be particularly helpful for better understanding the meanings associated with words as well as how the words are used in everyday communication. Research has shown that the methods used can influence the data obtained. Future research should also considering using different numbers of leisure domain terms and attributes. The use of several methods and the use of online and more traditional approaches should be employed to understand the underlying phenomena.

Future studies should also seek to understand the relationship of the leisure domain with other domains. The literature contains many references to leisure as the opposite of work. Understanding the perceptual connection between these domains may provide an understanding of how individuals navigate their own lives. Similarly, more attention should be directed at understanding the attributes underlying the leisure terms domain. Attributes or characteristics other than those included in this study may be important factors shaping how individuals think of leisure and related terms. Additionally, the relationship between attributes and other factors, such as life stage, may yield interesting and important findings.

Cultural consonance (Dressler, Balieiro, Ribeiro, & dos Santos, 2005; 2007) could be employed to better understand what happens when individuals' experiences do not match the conceptual images they have of the domain. For example, ratings show that individuals generally think of leisure domain terms as enjoyable. However, individuals can readily note unpleasant leisure experiences. Understanding the conceptual images of the domain may provide insight into individuals' expectations regarding leisure. It may also shed light on how individuals negotiate less-than-ideal experiences as well as the consequences of doing so.

## CONCLUSIONS

The present study provides a first step to better understanding how academics and non-academics think about leisure and related terms. The results suggest that academics and students have similar views of many of the leisure-related words studied. Moreover, both Mandarin Chinese and Persian appear to have more-or-less direct translations for leisure and closely related terms. The results also suggest that academics and students differ most with respect to the meanings they associate with the terms “amusement” and “entertainment.” This information may be useful for educators in the leisure field trying to inform students of the importance or diversity of leisure and recreation. Practitioners (inasmuch as they are similar to academics) may also be able to use the information to better deliver educational or marketing materials to their stakeholders and clients. The observed differences between the academics and students in the present study may serve as a point of reflection for leisure academics who may be ignoring “packaged” forms of leisure because they are viewed in a somewhat negative light by them (but not lay people). However, academics generally do not study the more “packaged” activities associated with these terms (such as watching television). Perhaps academics will view this as an opportunity to investigate such recreations to determine whether the negative connotations are merited or whether they do provide rewarding recreational opportunities for participants.

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## APPENDIX A

### Free Listing Survey Recruitment Email

***Subject:***

Help with Survey on Leisure and Related Words

***Email Text:***

Hello,

Garry Chick and I in the Department of Recreation, Park and Tourism Management at Penn State University are conducting a study of leisure-related terms and their meanings. We would like to ask for your help in this task by completing a 10-minute online questionnaire.

Your opinion is important. Participation in this study is completely voluntary; you may choose not to participate, or you may quit at any time. All of your answers are confidential. Specific individual responses will not be reported, and all data will be grouped for reporting purposes.

If you are willing to participate in this study, please visit: [link to site goes here.](#)

If you have questions or want to know more about the survey, you can contact me by email at [apurrington@psu.edu](mailto:apurrington@psu.edu) or via phone at 814.441.5755.

-Andrew

## Free Listing Reminder Recruitment Email

***Subject:***

Help with Survey on Leisure and Related Words

***Email Text:***

Hello,

Garry Chick and I in the Department of Recreation, Park and Tourism Management at Penn State University are conducting a study of leisure-related terms and their meanings. We would like to ask again for your help in this task by completing a 10-minute online questionnaire.

If you have already completed the survey, thank you for your time. If you have not completed the survey, please take a couple of minutes to do so. We would like to include your viewpoint and opinion in the study.

Participation in this study is completely voluntary; you may choose not to participate, or you may quit at any time. All of your answers are confidential. Specific individual responses will not be reported, and all data will be grouped for reporting purposes.

If you are willing to participate, please visit: [link to site goes here.](#)

If you have questions or want to know more about the survey, you can contact me by email at [apurrington@psu.edu](mailto:apurrington@psu.edu) or via phone at 814.441.5755.

-Andrew

## Leisure Meanings Survey Recruitment Email (SPRENET)

***Subject:***

Help with Survey on Leisure Meanings

***Email Text:***

Hello,

I am conducting a study to better understand the meanings academics associate with leisure and related words. This study is an extension of research conducted with academics in the summer of 2012. My adviser, Dr. Garry Chick, and I would again like to ask for your help in this task by completing a 10-minute online questionnaire.

Your opinion is important. Participation in this study is completely voluntary; you may choose not to participate, or you may quit at any time. All of your answers are confidential. Specific individual responses will not be reported, and all data will be grouped for reporting purposes.

If you are willing to participate in this study, please visit: [survey link goes here](#)

If you have questions or want to know more about the survey, you can contact me by email at [apurrington@psu.edu](mailto:apurrington@psu.edu) or via phone at 814.441.5755.

-Andrew

## Leisure Meanings Survey Reminder Recruitment Email (SPRENET)

**Subject:**

Help with Survey on Leisure Meanings

**Email Text:**

Hello,

I am conducting a study to better understand the meanings academics associate with leisure and related words. The results of the survey will be used to compare the views of academics with those of non-academics. My adviser, Dr. Garry Chick, and I would again like to ask for your help in this task by completing a 10-minute online questionnaire. This survey is an extension of research conducted in the summer of 2012. If you participated in the previous study, we would appreciate your participation in the follow-up survey.

Your opinion is important. Participation in this study is completely voluntary; you may choose not to participate, or you may quit at any time. All of your answers are confidential. Specific individual responses will not be reported, and all data will be grouped for reporting purposes.

If you completed the survey we email you about in November 2012, thank you for your help. If you have not completed the follow-up survey but are willing to participate in this study, please visit: [survey link goes here](#)

If you have questions or want to know more about the survey, you can contact me by email at [apurrington@psu.edu](mailto:apurrington@psu.edu) or via phone at 814.441.5755.

-Andrew

## RPTM 120 Recruitment Script

Good afternoon,

My name is \_\_\_\_\_, and I am here to ask for your help with a study on the meanings of words. As we all know, there are lots of words in English that are similar to other words. Rather than look up similar words in a dictionary, we want to know your opinions about how words are related and about their meanings.

We would like to ask for your help by completing a 10-minute online questionnaire as part of a study conducted being by Andrew Purrington and Garry Chick in the RPTM department. Participation in this study is completely voluntary. You may choose not to participate, but your opinion is important to the study and your help will be greatly appreciated.

If you are willing to participate in this study, please visit:

[https://hhdevpsu.qualtrics.com/SE/?SID=SV\\_55Amm0A8bxSxnAp](https://hhdevpsu.qualtrics.com/SE/?SID=SV_55Amm0A8bxSxnAp)

If you have questions or want to know more about the survey, you can contact Andrew by email at [apurrington@psu.edu](mailto:apurrington@psu.edu) or via phone at 814.441.5755.

Thank you.

### Recruitment Slide

## Word Meanings Survey

- What you think of words matters!
- So, tell us what words mean to you by taking a *10 minute* online survey
- Find the survey at:  
[https://hhdevpsu.qualtrics.com/SE/?SID=SV\\_55Amm0A8bxSxnAp](https://hhdevpsu.qualtrics.com/SE/?SID=SV_55Amm0A8bxSxnAp)
- If you have questions, contact Andrew Purrington at [apurrington@psu.edu](mailto:apurrington@psu.edu) or (814) 441-5755

## APPENDIX B

### Phase One: Free Listing Survey

**Welcome! Thank you for taking part in this survey.**

Please read the information below describing the survey and your rights. When you are finished, click the button at the bottom of the page to begin the survey.

**1. Purpose of the Study:**

The purpose of this study is to gain a better understanding of the words and characteristics you associate with leisure and related terms.

**2. Procedures to be followed:**

You will be asked to complete a series of free listing tasks in which you will be asked to type words based on the provided prompt.

**3. Duration/Time:**

Completing the survey will take about 10 minutes.

**4. Statement of Confidentiality:**

Your participation in this research is confidential. The survey does not ask for any information that would identify who the responses belong to. In the event any publication or presentation results from the research, no personally identifiable information will be shared because your name is in no way linked to your responses. All data will be grouped for reporting purposes.

**5. Right to Ask Questions:**

This survey is being conducted by Andrew Purrington and Garry Chick in the Department of Recreation, Park and Tourism Management at Penn State University. If you have questions or want to know more about the survey, please contact Andrew Purrington by phone at (814) 865-1851 or by email at [apurrington@psu.edu](mailto:apurrington@psu.edu).

**6. Voluntary Participation:**

Your participation in this study is completely voluntary; you may choose not to participate, or you may quit at any time. You do not have to answer any questions you do not want to answer.

You must be 18 years of age or older to take part in this research study. Completion of the survey implies that you have read the information in this form and consent to take part in the research. Please print and keep a copy of this form for your records or future reference.

**Principal Investigators:**

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On the pages that follow, you will be asked to complete a series of free listing tasks. In each, you will be asked to type items that match the provided description. For example, if you were to see the following:

Please take a couple of minutes to list all of the items you would take camping.

You might list the following items:

Tent  
Sleeping bag  
Cook stove  
Cooking pot  
Backpack  
Headlamp

Others may list these or other items they regard as important.

In each of the free listing tasks that follow, there are no right or wrong answers. They are not tests. You should include any items you feel match the provided description. There is also no minimum number of items you should provide. Provide as many items as you can think of within a couple of minutes.

Please take a few minutes to list all the English words you can think of whose meaning is similar or related to the word Leisure. *Please use commas to separate words or phrases.*

Please take a few minutes to list all the English words you can think of whose meaning is similar or related to the word Recreation. *You may use any words you like regardless of whether or not you included them in the previous list. Please use commas to separate words or phrases.*

Please take a few minutes to list all the English words or short phrases you can think of whose meaning is similar or related to the word Play. *You may use any words you like regardless of whether or not you included them in previous lists. Please use commas to separate words or phrases.*



**You are halfway through the survey!**

On the pages that follow, you will be asked to complete another series of free listing tasks. However, unlike previous tasks, in these you will be asked to identify characteristics you associate with the provided prompt (word). For example, if you were to see the following:

Please take a few minutes to list all of the characteristics you associate with camping.

You may list the following characteristics:

Outdoors  
Adventurous  
Relaxing  
Exhausting

Others may list these or other characteristics they regard as important.

As before, there are no right or wrong answers to the free listing tasks that follow. They are not tests. You should include any items you feel match the provided description. There is also no minimum number of items you should provide. Provide as many items as you can think of within a couple of minutes.

Please take a few minutes to list all of the characteristics or attributes you associate with the English word Leisure. *Please use commas to separate your entries.*

Please take a few minutes to list all of the characteristics or attributes you associate with the English word Recreation. *You may use any items you like regardless of whether or not you included them in the previous list. Please use commas to separate your entries.*

Please take a few minutes to list all of the characteristics or attributes you associate with the English word Play. *You may use any items you like regardless of whether or not you included them in previous lists. Please use commas to separate your entries.*

**We would like to know more about you. Please answer the following questions about your background.**

What is your gender?

- Male
- Female

What is your age (in years)?

Years old \_\_\_\_\_

What type of job do you currently have? (If retired, please select the type of job from which you retired.)

- Academic (Teaching and/or Research)
- Practitioner
- Research (Non-academic)
- Other (please describe)

\_\_\_\_\_

Please select the response that best describes your current job. (If retired, please select the description that matches the job from which you retired.)

- Faculty member (emphasis on research)
- Faculty member (emphasis on teaching)
- Instructor
- Academic adviser
- Graduate student
- Post-doc
- Programmer
- Planner
- Manager
- Researcher/Consultant (not affiliated with a college or university)
- Retired
- Other (please describe)

\_\_\_\_\_

Select the option below that best describes the type of institution at which you are employed.

- College/University
- Public park/forest/other land management agency
- Public recreation and/or parks department
- Private commercial enterprise
- Research or consulting
- Other (please describe)

\_\_\_\_\_

What is the highest level of school that you have completed?

- Less than high school
- High school
- Some college
- Associates degree
- Bachelors degree
- Masters degree
- PhD

Approximately what was your total household income (before taxes) for 2007?

- |  |  |
|--|--|
| <input type="checkbox"/> Less than \$25,000    | <input type="checkbox"/> \$125,001 - \$150,000 |
| <input type="checkbox"/> \$25,000 - \$50,000   | <input type="checkbox"/> \$150,001 - \$175,000 |
| <input type="checkbox"/> \$50,001 - \$75,000   | <input type="checkbox"/> \$175,001 - \$200,000 |
| <input type="checkbox"/> \$75,001 - \$100,000  | <input type="checkbox"/> \$200,001 - \$225,000 |
| <input type="checkbox"/> \$100,001 - \$125,000 | <input type="checkbox"/> \$225,001 or more     |

What is your native (first) language?

---

**This completes our survey.  
Thanks for your help!**

## **Phase One: Leisure Meanings Survey (SPRENET)**

### **Welcome! Thank you for taking part in this survey.**

Please read the information below describing the survey and your rights as a participant. When you are finished, click the button at the bottom of the page to begin the survey.

#### **1. Purpose of the Study:**

The purpose of this study is to gain a better understanding of the meanings associated with leisure and related concepts. The words and characteristics selected for this survey are based on research conducted in the summer of 2012.

#### **2. Procedures to be followed:**

You will be asked to rate the similarity of pairs of words and rate the degree to which specific characteristics are indicative of those words.

#### **3. Duration/Time:**

Completing the survey will take about 10 minutes.

#### **4. Statement of Confidentiality:**

Your participation in this research is confidential. The survey does not ask for any information that would identify who the responses belong to. In the event any publication or presentation results from the research, no personally identifiable information will be shared because your name is in no way linked to your responses. All data will be grouped for reporting purposes.

#### **5. Right to Ask Questions:**

This survey is being conducted by Andrew Purrington and Garry Chick in the Department of Recreation, Park and Tourism Management at Penn State University. If you have questions or want to know more about the survey, please contact Andrew Purrington by phone at (814) 865-1851 or by email at [apurrington@psu.edu](mailto:apurrington@psu.edu).

#### **6. Voluntary Participation:**

Your participation in this study is completely voluntary; you may choose not to participate, or you may quit at any time. You do not have to answer any questions you do not want to answer.

You must be 18 years of age or older to take part in this research study. Completion of the survey implies that you have read the information in this form and consent to take part in the research. Please print and keep a copy of this form for your records or future reference.

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On the pages that follow, you will be asked to judge the similarity of several pairs of words on a seven-point scale ranging from *Not at all similar* to *Extremely similar*.

For example, if presented with the following question:

Please rate the similarity of the words' meanings.

		<i>Not at all</i>						<i>Extremely</i>
		<i>similar</i>						<i>similar</i>
Mother	Boss	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

You would rate how similar the meanings of the words “mother” and “boss” are to you.

This is not a test and there are no right or wrong answers. When rating each pair, think of the similarity of the words' meanings. Each pair of words is unique; they do not repeat themselves.

For each pair of words, please rate the similarity of the words' meanings.

*Note: "Play" refers to the activity, not a stage performance.*

		<i>Not at all similar</i>					<i>Extremely similar</i>	
Recreation	Nonwork	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nonwork	Relaxation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recreation	Free Time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recreation	Entertainment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hobby	Free Time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hobby	Pastime	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Entertainment	Relaxation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relaxation	Hobby	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relaxation	Leisure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nonwork	Leisure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Amusement	Entertainment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leisure	Pastime	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Entertainment	Pastime	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relaxation	Free Time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Entertainment	Nonwork	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

For each pair of words, please rate the similarity of the words' meanings. Each pair of words is unique and does not repeat.

*Note: "Play" refers to the activity, not a stage performance.*

		<i>Not at all similar</i>					<i>Extremely similar</i>	
Hobby	Leisure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Free Time	Entertainment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Entertainment	Hobby	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Amusement	Play	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nonwork	Pastime	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pastime	Play	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nonwork	Free Time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leisure	Amusement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hobby	Amusement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relaxation	Amusement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recreation	Play	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Free Time	Amusement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recreation	Relaxation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nonwork	Hobby	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recreation	Amusement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**You are almost done with this task!**

**Please click the "Next" button to complete this set of questions.**



For each pair of words, please rate the similarity of the words' meanings. Each pair of words is unique and does not repeat.

*Note: "Play" refers to the activity, not a stage performance.*

		<i>Not at all similar</i>					<i>Extremely similar</i>	
Play	Hobby	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Play	Free Time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leisure	Free Time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nonwork	Amusement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leisure	Recreation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leisure	Play	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recreation	Hobby	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nonwork	Play	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relaxation	Pastime	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Play	Entertainment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relaxation	Play	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Amusement	Pastime	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leisure	Entertainment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pastime	Free Time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pastime	Recreation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**You are halfway through the survey!**

We are also interested in better understanding the meanings typically associated with the words on the previous pages. When we hear or see a word, that word evokes certain feelings or meanings to us. For example, the word mother is usually associated with caring and nurturing, among others. So, if presented with the question below:

To what degree do you typically associate the characteristics *good* and *bad* with each word below?

	<i>Extremely</i>						<i>Extremely</i>
	<i>good</i>						<i>bad</i>
Mother	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Many individuals would rate the word “mother” extremely good (or nearly so).

On the following pages, you will be asked to make judgments about the 10 words included in the previous task. On each page, you will be asked to rate each word in terms of a different pair of descriptors. When rating each word, think of the meanings you typically associate with the concept referred to by the word. As before, there are no right or wrong answers; this is not a test.

Note: “Play” refers to the activity, not a stage performance.

To what degree do you typically associate the characteristics *dull* and *enjoyable* with each word below?

	<i>Extremely dull</i>						<i>Extremely enjoyable</i>
Amusement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Entertainment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Free Time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hobby	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leisure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nonwork	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pastime	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Play	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recreation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relaxation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

To what degree do you typically associate the characteristics *spontaneous* and *organized* with each word below?

	<i>Extremely spontaneous</i>						<i>Extremely organized</i>
Amusement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Entertainment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Free Time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hobby	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leisure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nonwork	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pastime	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Play	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recreation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relaxation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

To what degree do you typically associate the characteristics *active* and *passive* with each word below?

	<i>Extremely active</i>						<i>Extremely passive</i>
Amusement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Entertainment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Free Time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hobby	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leisure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nonwork	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pastime	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Play	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recreation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relaxation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**You are over halfway through this task!**  
**Please click the “Next” button to complete this set of questions.**

To what degree do you typically associate the characteristics *social* and *solitary* with each word below?

	<i>Extremely social</i>						<i>Extremely solitary</i>
Amusement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Entertainment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Free Time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hobby	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leisure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nonwork	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pastime	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Play	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recreation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relaxation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

To what degree do you typically associate the characteristics *conformity* and *freedom* with each word below?

	<i>High degree of conformity</i>					<i>High degree of freedom</i>	
Amusement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Entertainment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Free Time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hobby	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leisure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nonwork	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pastime	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Play	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recreation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relaxation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Please answer the following questions about your background.**

What is your gender?

- Male
- Female

What is your age (in years)?

\_\_\_\_\_

Please select the response that best describes your current job. (If retired, please select the description that matches the job from which you retired.)

- Faculty member (emphasis on research)
- Faculty member (emphasis on teaching)
- Instructor
- Academic adviser
- Graduate student
- Post-doc
- Programmer
- Planner
- Manager
- Researcher/Consultant (not affiliated with a college or university)
- Other (please describe)

\_\_\_\_\_

Select the option below that best describes the type of institution at which you are employed. (If retired, please select the type of institution from which you retired.)

- College/University
- Public park/forest/other land management agency
- Public recreation and/or parks department
- Private commercial enterprise
- Research or consulting
- Other (please describe)

\_\_\_\_\_

What is the highest level of school that you have completed?

- Less than high school
- High school
- Some college
- Associate's degree
- Bachelor's degree
- Master's degree
- PhD or Professional degree



Approximately what was your total household income (before taxes) for 2007?

- |  |  |
|--|--|
| <input type="checkbox"/> Less than \$25,000    | <input type="checkbox"/> \$125,001 - \$150,000 |
| <input type="checkbox"/> \$25,000 - \$50,000   | <input type="checkbox"/> \$150,001 - \$175,000 |
| <input type="checkbox"/> \$50,001 - \$75,000   | <input type="checkbox"/> \$175,001 - \$200,000 |
| <input type="checkbox"/> \$75,001 - \$100,000  | <input type="checkbox"/> \$200,001 - \$225,000 |
| <input type="checkbox"/> \$100,001 - \$125,000 | <input type="checkbox"/> \$225,001 or more     |

What is your native (first) language?

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**This completes our survey.  
Thanks for your help!**

## APPENDIX C

### Phase Two: Leisure Meanings Survey (RPTM 120)

**Welcome! Thank you for taking part in this survey.**

Please read the information below describing the survey and your rights as a participant. When you are finished, click the button at the bottom of the page to begin the survey.

**1. Purpose of the Study:**

The purpose of this study is to gain a better understanding of the meanings associated with certain words and concepts.

**2. Procedures to be followed:**

You will be asked to rate the similarity of pairs of words and rate the degree to which specific characteristics are indicative of those words.

**3. Duration/Time:**

Completing the survey will take about 10 minutes.

**4. Statement of Confidentiality:**

Your participation in this research is confidential. In the event any publication or presentation results from the research, no personally identifiable information will be shared. All data will be grouped for reporting purposes.

**5. Right to Ask Questions:**

This survey is being conducted by Andrew Purrington and Garry Chick in the Department of Recreation, Park and Tourism Management at Penn State University. If you have questions or want to know more about the survey, please contact Andrew Purrington by phone at (814) 865-1851 or by email at [apurrington@psu.edu](mailto:apurrington@psu.edu).

**6. Voluntary Participation:**

Your participation in this study is completely voluntary; you may choose not to participate, or you may quit at any time. You do not have to answer any questions you do not want to answer.

You must be 18 years of age or older to take part in this research study. Completion of the survey implies that you have read the information in this form and consent to take part in the research. Please print and keep a copy of this form for your records or future reference.

**Principal Investigators:**

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On the pages that follow, you will be asked to judge the similarity of several pairs of words on a seven-point scale ranging from *Not at all similar* to *Extremely similar*.

For example, if presented with the following question:

Please rate the similarity of the words' meanings.

		<i>Not at all</i>						<i>Extremely</i>
		<i>similar</i>						<i>similar</i>
Mother	Boss	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

You would rate how similar the meanings of the words “mother” and “boss” are to you.

This is not a test and there are no right or wrong answers. When rating each pair, think of the similarity of the words' meanings. Each pair of words is unique; they do not repeat themselves.

For each pair of words, please rate the similarity of the words' meanings.

*Note: "Play" refers to the activity, not a stage performance.*

		<i>Not at all similar</i>					<i>Extremely similar</i>	
Recreation	Nonwork	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nonwork	Relaxation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recreation	Free Time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recreation	Entertainment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hobby	Free Time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hobby	Pastime	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Entertainment	Relaxation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relaxation	Hobby	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relaxation	Leisure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nonwork	Leisure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Amusement	Entertainment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leisure	Pastime	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Entertainment	Pastime	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relaxation	Free Time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Entertainment	Nonwork	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

For each pair of words, please rate the similarity of the words' meanings. Each pair of words is unique and does not repeat.

*Note: "Play" refers to the activity, not a stage performance.*

		<i>Not at all similar</i>					<i>Extremely similar</i>	
Hobby	Leisure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Free Time	Entertainment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Entertainment	Hobby	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Amusement	Play	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nonwork	Pastime	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pastime	Play	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nonwork	Free Time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leisure	Amusement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hobby	Amusement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relaxation	Amusement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recreation	Play	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Free Time	Amusement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recreation	Relaxation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nonwork	Hobby	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recreation	Amusement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

You are almost done with this task!

Please click the "Next" button to complete this set of questions.

For each pair of words, please rate the similarity of the words' meanings. Each pair of words is unique and does not repeat.

*Note: "Play" refers to the activity, not a stage performance.*

		<i>Not at all similar</i>					<i>Extremely similar</i>	
Play	Hobby	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Play	Free Time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leisure	Free Time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nonwork	Amusement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leisure	Recreation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leisure	Play	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recreation	Hobby	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nonwork	Play	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relaxation	Pastime	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Play	Entertainment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relaxation	Play	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Amusement	Pastime	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leisure	Entertainment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pastime	Free Time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pastime	Recreation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**You are halfway through the survey!**

We are also interested in better understanding the meanings typically associated with the words on the previous pages. When we hear or see a word, that word evokes certain feelings or meanings to us. For example, the word mother is usually associated with caring and nurturing, among others. So, if presented with the question below:

To what degree do you typically associate the characteristics *good* and *bad* with each word below?

	<i>Extremely</i>						<i>Extremely</i>
	<i>good</i>						<i>bad</i>
Mother	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Many individuals would rate the word “mother” extremely good (or nearly so).

On the following pages, you will be asked to make judgments about the 10 words included in the previous task. On each page, you will be asked to rate each word in terms of a different pair of descriptors. When rating each word, think of the meanings you typically associate with the concept referred to by the word. As before, there are no right or wrong answers; this is not a test.

Note: “Play” refers to the activity, not a stage performance.

To what degree do you typically associate the characteristics *dull* and *enjoyable* with each word below?

	<i>Extremely dull</i>						<i>Extremely enjoyable</i>
Amusement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Entertainment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Free Time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hobby	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leisure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nonwork	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pastime	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Play	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recreation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relaxation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



To what degree do you typically associate the characteristics *spontaneous* and *organized* with each word below?

	<i>Extremely spontaneous</i>						<i>Extremely organized</i>
Amusement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Entertainment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Free Time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hobby	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leisure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nonwork	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pastime	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Play	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recreation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relaxation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

To what degree do you typically associate the characteristics *active* and *passive* with each word below?

	<i>Extremely active</i>						<i>Extremely passive</i>
Amusement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Entertainment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Free Time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hobby	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leisure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nonwork	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pastime	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Play	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recreation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relaxation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**You are over halfway through this task!**  
**Please click the “Next” button to complete this set of questions.**

To what degree do you typically associate the characteristics *social* and *solitary* with each word below?

	<i>Extremely social</i>						<i>Extremely solitary</i>
Amusement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Entertainment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Free Time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hobby	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leisure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nonwork	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pastime	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Play	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recreation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relaxation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

To what degree do you typically associate the characteristics *conformity* and *freedom* with each word below?

	<i>High degree of conformity</i>					<i>High degree of freedom</i>	
Amusement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Entertainment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Free Time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hobby	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leisure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nonwork	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pastime	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Play	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recreation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relaxation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Please answer the following questions about your background.**

What is your gender?

- Male
- Female

What is your age (in years)?

---

What is your current class standing?

- Freshman
- Sophomore
- Junior
- Senior
- Super-senior

What is your major?

---

How would you characterize your grades last semester?

- Below average
- Average
- Above average

How would you characterize your family's household income?

- Below average
- Average
- Above average

What is your native (first) language?

---

What is other languages (if any) do you speak fluently?

---

**This completes our survey.  
Thanks for your help!**

## **Phase Two: Translating English to Chinese**

### **Welcome! Thank you for taking part in this survey.**

Please read the information below describing the survey and your rights as a participant. When you are finished, click the button at the bottom of the page to begin the survey.

#### **1. Purpose of the Study:**

The purpose of this study is to gain a better understanding of how specific words are translated into the Chinese (Mandarin) language.

#### **2. Procedures to be followed:**

You will be asked to translate a series of English words from English into Chinese (Mandarin). For your convenience, we have provided an addressed envelope for you to return the completed survey.

#### **3. Duration/Time:**

Completing the survey will take about 10 minutes.

#### **4. Statement of Confidentiality:**

Your participation in this research is confidential. The survey does not ask for any information that would identify who the responses belong to. In the event any publication or presentation results from the research, no personally identifiable information will be shared because your name is in no way linked to your responses. All data will be grouped for reporting purposes.

#### **5. Right to Ask Questions:**

This survey is being conducted by Andrew Purrington and Garry Chick in the Department of Recreation, Park and Tourism Management at Penn State University. If you have questions or want to know more about the survey, please contact Andrew Purrington by phone at (814) 865-1851 or by email at [apurrington@psu.edu](mailto:apurrington@psu.edu).

#### **6. Voluntary Participation:**

Your participation in this study is completely voluntary; you may choose not to participate, or you may quit at any time. You do not have to answer any questions you do not want to answer.

You must be 18 years of age or older to take part in this research study. Completion of the survey implies that you have read the information in this form and consent to take part in the research. Please print and keep a copy of this form for your records or future reference.

#### **Principal Investigators:**

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**Please translate the words below from English to Chinese (Mandarin) in the space provided next to each word. This is not a test and there are no right or wrong answers. Provide the translation you feel best captures the meaning of each word using one word or the shortest phrase possible.**

	<b>Chinese Characters</b>	<b>English Characters</b>
Home	_____	_____
Pastime	_____	_____
Friend	_____	_____
Work	_____	_____
Free time	_____	_____
Story	_____	_____
Leisure	_____	_____
Relaxation	_____	_____
Water	_____	_____
Nonwork	_____	_____
Time	_____	_____
Family	_____	_____
Play	_____	_____
Hobby	_____	_____
Food	_____	_____
Entertainment	_____	_____
People	_____	_____
Recreation	_____	_____
Amusement	_____	_____

**Thank you! This completes the survey.  
Please return your completed survey to me via email.**

## **Phase Two: Translating English to Persian**

**Welcome! Thank you for taking part in this survey.**

Please read the information below describing the survey and your rights as a participant. When you are finished, click the button at the bottom of the page to begin the survey.

**1. Purpose of the Study:**

The purpose of this study is to gain a better understanding of how specific words are translated into the Persian language.

**2. Procedures to be followed:**

You will be asked to translate a series of English words from English into Persian. For your convenience, we have provided an addressed envelope for you to return the completed survey.

**3. Duration/Time:**

Completing the survey will take about 10 minutes.

**4. Statement of Confidentiality:**

Your participation in this research is confidential. The survey does not ask for any information that would identify who the responses belong to. In the event any publication or presentation results from the research, no personally identifiable information will be shared because your name is in no way linked to your responses. All data will be grouped for reporting purposes.

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**6. Voluntary Participation:**

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**Please translate the words below from English to Persian in the space provided next to each word. This is not a test and there are no right or wrong answers. Provide the translation you feel best captures the meaning of each word using one word or the shortest phrase possible.**

	<b>Persian Characters</b>	<b>English Characters</b>
Home	_____	_____
Pastime	_____	_____
Friend	_____	_____
Work	_____	_____
Free time	_____	_____
Story	_____	_____
Leisure	_____	_____
Relaxation	_____	_____
Water	_____	_____
Nonwork	_____	_____
Time	_____	_____
Family	_____	_____
Play	_____	_____
Hobby	_____	_____
Food	_____	_____
Entertainment	_____	_____
People	_____	_____
Recreation	_____	_____
Amusement	_____	_____

**Thank you! This completes the survey.  
Please return your completed survey to me via email.**

## **Phase Two: Translating Chinese to English**

**Welcome! Thank you for taking part in this survey.**

Please read the information below describing the survey and your rights as a participant. When you are finished, click the button at the bottom of the page to begin the survey.

**1. Purpose of the Study:**

The purpose of this study is to gain a better understanding of how specific words are translated from Chinese (Mandarin) to English.

**2. Procedures to be followed:**

You will be asked to translate a series of words from Chinese (Mandarin) into English.

**3. Duration/Time:**

Completing the survey will take about 10 minutes.

**4. Statement of Confidentiality:**

Your participation in this research is confidential. The survey does not ask for any information that would identify who the responses belong to. In the event any publication or presentation results from the research, no personally identifiable information will be shared because your name is in no way linked to your responses. All data will be grouped for reporting purposes.

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Please translate the words below from Chinese (Mandarin) to English in the space provided next to each word. This is not a test and there are no right or wrong answers. Provide the translation you feel best captures the meaning of each word using one word or the shortest phrase possible.

	English Translation
家 (Jia)	_____
消遣 (Xiao Qian)	_____
朋友 (Peng You)	_____
工作 (Gong Zuo)	_____
空闲 (Kongxian)	_____
故事 (Gu Shi)	_____
休闲 (Xiu Xian)	_____
放松 (Fang Song)	_____
水 (Shui)	_____
不工作 (Bu Gong zuo)	_____
非工作 (Fei Gong Zuo)	_____
时间 (Shi Jian)	_____
家庭 (Jia Ting)	_____
玩 (Wan)	_____
爱好 (Ai Hao)	_____
食物 (Shi Wu)	_____
娱乐 (Yu Le)	_____
人们 (Ren Men)	_____
闲暇 (Xianxia)	_____
乐趣 (Lequ)	_____
趣味 (Qu Wei)	_____

**Thank you! This completes the survey. Please return your completed survey to me via email.**

## **Phase Two: Translating Persian to English**

**Welcome! Thank you for taking part in this survey.**

Please read the information below describing the survey and your rights as a participant. When you are finished, click the button at the bottom of the page to begin the survey.

**1. Purpose of the Study:**

The purpose of this study is to gain a better understanding of how specific words are translated from Persian into English.

**2. Procedures to be followed:**

You will be asked to translate a series of words from Persian into English.

**3. Duration/Time:**

Completing the survey will take about 10 minutes.

**4. Statement of Confidentiality:**

Your participation in this research is confidential. The survey does not ask for any information that would identify who the responses belong to. In the event any publication or presentation results from the research, no personally identifiable information will be shared because your name is in no way linked to your responses. All data will be grouped for reporting purposes.

**5. Right to Ask Questions:**

This survey is being conducted by Andrew Purrington and Garry Chick in the Department of Recreation, Park and Tourism Management at Penn State University. If you have questions or want to know more about the survey, please contact Andrew Purrington by phone at (814) 441-5755 or by email at [apurrington@psu.edu](mailto:apurrington@psu.edu).

**6. Voluntary Participation:**

Your participation in this study is completely voluntary; you may choose not to participate, or you may quit at any time. You do not have to answer any questions you do not want to answer.

You must be 18 years of age or older to take part in this research study. Completion of the survey implies that you have read the information in this form and consent to take part in the research. Please print and keep a copy of this form for your records or future reference.

**Principal Investigators:**

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Please translate the words below from Persian to English in the space provided next to each word. This is not a test and there are no right or wrong answers. Provide the translation you feel best captures the meaning of each word using one word or the shortest phrase possible.

	English Translation
خانه (Khaneh)	_____
وقت فراغت (Vaght e faraghat)	_____
دوست (Doost)	_____
کار (Kar)	_____
وقت آزاد (Vaghte Azad)	_____
داستان (Dastan)	_____
اوقات فراغت (Oghate Feraghat)	_____
استراحت (Esterahat)	_____
آب (Aab)	_____
غیرکاری (Gheire-Kari)	_____
زمان (Zaman)	_____
خانواده (Khanevadeh)	_____
بازی (Bazi)	_____
سرگرمی (Sargarmi)	_____
غذا (Ghazi)	_____
فراغت (Faraghat)	_____
مردم (Mardom)	_____
تفریح (Tafrih)	_____
آسودگی (Asoodegi)	_____

**Thank you! This completes the survey.  
Please return your completed survey to me via email.**

**VITA**  
**Andrew Purrington**

**Education**

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- 2014 Ph.D. Recreation, Park and Tourism Management  
The Pennsylvania State University
- 2009 M.S. Leisure Studies  
The Pennsylvania State University
- 2005 B.S. Recreation and Leisure Services  
Middle Tennessee State University

**Academic Positions**

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- 2014 Research Associate  
Human Relations Area Files, Inc.  
New Haven, CT
- 2013 Instructor  
Department of Health Education and Recreation  
Southern Illinois University, Carbondale
- 2006 – 2013 Instructor/Graduate Assistant  
Department of Recreation, Park and Tourism Management  
The Pennsylvania State University

**Selected Peer-Reviewed Publications**

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- Purrington, A., & Hickerson, B.D. (2013). Leisure as a Cross-Cultural Concept. *World Leisure Journal*, 55, 125-137.
- Chick, G., Yarnal, C., & Purrington, A. (2012). Play and Mate Preference: Testing the Signal Theory of Adult Playfulness. *American Journal of Play*, 4, 405-438.
- Purrington, A. & Zinn, H. (2011). Influence of Loss Aversion on Mountain Bikers' Behavioral Intentions. *Environmental Management*, 48, 547-557.

**Selected Conference Presentations**

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- Purrington, A., Chick, G., & Yarnal, C. (2012). *Analysis of the Meanings of Leisure and Recreation Terms*. 2012 Northeastern Recreation Research Symposium. Cooperstown, NY.
- Gage, R., Purrington, A., & Zinn, H.C. (2012). *The Influence of Loss Aversion on Mountain Bikers' Intentions to Volunteer*. 2012 Northeastern Recreation Research Symposium. Cooperstown, NY.
- Purrington, A., Zinn, H.C., Chick, G., & Kerstetter, D. (2009). *The Influence of Loss Aversion on Mountain Bikers' Behavioral Intentions*. 2009 Northeastern Recreation Research Symposium. Bolton Landing, NY.

**Teaching Experience (Sole Instructor)**

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| Research Methods (Undergraduate)                   | Leisure and Human Behavior (Undergraduate) |
| Administration of Leisure Services (Undergraduate) | Senior Management Seminar (Undergraduate)  |
| Modern Concepts of Leisure (Graduate)              |  |