FACILITIES-RELATED BEHAVIORS OF RESIDENCE LIFE PROFESSIONALS

By

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(Under the Direction of Merrily S. Dunn)

ABSTRACT

Student affairs graduate preparation programs spend the majority of their time focusing on the human development components of the profession. It is vitally important for those professionals entering into the field of university housing to understand that the physical facilities play a critical role in that development and therefore must be a focus of development and growth for the new professional.

INDEX WORDS: Residence halls, Facilities, Residence life professionals, College housing, University housing

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DEDICATION

I am not, by nature, a word-smith, therefore the appreciation that I express on paper can never express the debt of gratitude that I owe my family and those that have helped me along the way. I would like to dedicate this dissertation to my family. This is the culmination of a four-year process that has taken me away from you so often. Without your patience and understanding, this would not have been possible. To my wife, Allyson; this has been a journey that you have endured as well and for that I thank you. To my son, Sam; you have been my measuring stick for progress throughout this process. To my daughter, Abby; you have been my motivation to finish. To my extended family and in-laws, thank you for your patience for all the times I couldn't see you. I would also like to thank my parents who provided me the motivation and desire to even see college as an option.

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CHAPTER 1

The roles and responsibilities of residence life professionals in college and university residence halls are typically separate and distinctive from the facilities aspect of many on-campus housing departments. The Standards for College and University Student Housing (ACUHO-I, 2003) and Hallenbeck (1993) state that university housing operations are divided into three functional areas: business management, residence life (referred to as education/programming) and facilities (referred to as physical plant). It is important to note that the ACUHO-I standards and Hallenbeck also refer to the functional areas as "interdependent."

To understand this study first requires an understanding of the contents of the functional areas of housing, particularly facilities and residence life as they are the primary focus of this research. Residence life is composed of a variety of activities including both educational and social programming. Under ideal conditions, educational programming is proactive in an effort to challenge students developmentally. The topics might range from multicultural understanding, study abroad opportunities, or enhancing communication skills with roommates. Some programming also attempts to address identified issues ranging from homophobia to career exploration. Social programming occurs to provide students an opportunity to interact with other residents for the purposes of community building within a particular wing, floor or even throughout the entire residence hall.

Residence life might also encompass the judicial process. In some systems a residence life professional is responsible for sanctioning, or in others, students are trained to serve that function. Advising student groups is another responsibility for residence life professionals.

Advising occurs with the aforementioned students during judicial proceedings, individual residence hall councils or associations, or similar groups at the departmental level.

Supervision of undergraduate paraprofessional and/or graduate staff members is a major task for many residence life professionals. In this supervisory role, the residence life professional might supervise individuals with an extensive prior work history or no work history at all. For the middle manager, supervision can range from full-time entry-level professionals with varying academic degrees to graduate students pursuing terminal degrees.

At times residence life professionals also work in the area of residential learning communities. In these communities, residence life professionals work collaboratively with faculty members to extend learning beyond the classroom and into the residence halls. Educational and social programming focuses on topics and areas that connect classroom learning to the living environment or outside the university setting.

The initial overview of residence life functions appears people-focused. When these functions are compared to facilities management, with the emphasis on buildings and the systems required to keep them operating in optimal condition, it is hoped the reader will not assume that they are managed with people removed from the equation. Facilities management is a dynamic process that continually keeps people in mind; however, the area of facilities management may refer to these individuals as "customers," rather than residents.

When considering the facilities management of college or university housing, several major components must be considered. One of the most crucial is preventive maintenance. When problems emerge and maintenance is deferred until later, repairs generally cost more over the long-term. It is important to note that there are two major types of maintenance issues that preventive maintenance attempts to address; planned and unplanned. If more planned

maintenance can occur than unplanned maintenance, the benefits to the housing department's operating budget are enormous. Unplanned maintenance contains numerous variables that cannot be accounted for. Labor, parts or total disruption to the student population are among the issues that cannot be predicted when dealing with unplanned maintenance.

Facilities management can also include custodial operations. While the maintenance portion of facilities is the focus of this research, custodial operations are also critical. The inclusion of custodial operations results in the addition of many people to be managed. Even if custodial operations are outsourced, the contract management associated with those staff members is important.

Long-term operational planning is also a part of the overall facilities area. In facilities operations, the ability to assess a building and plan for future projects is essential. An important part of planning is the projection of revenue loss and gain. In an effort to maximize long-term income, the ability to plan for the absorption of revenue loss is critical. This operational planning is a common practice within the area of facilities management. Facilities must be viewed as a tool for revenue generation for the purposes of operational planning (McGregor & Then, 1999). During summer months, residence halls, if properly managed, are utilized to host individuals and groups from both inside and outside of the university. The revenue generated from these groups adds to a housing operation's bottom line.

General housing operations are presented visually in Figure 1. The connecting lines represent that interdependence discussed by ACUHO-I (2003) and Hallenbeck (1993).

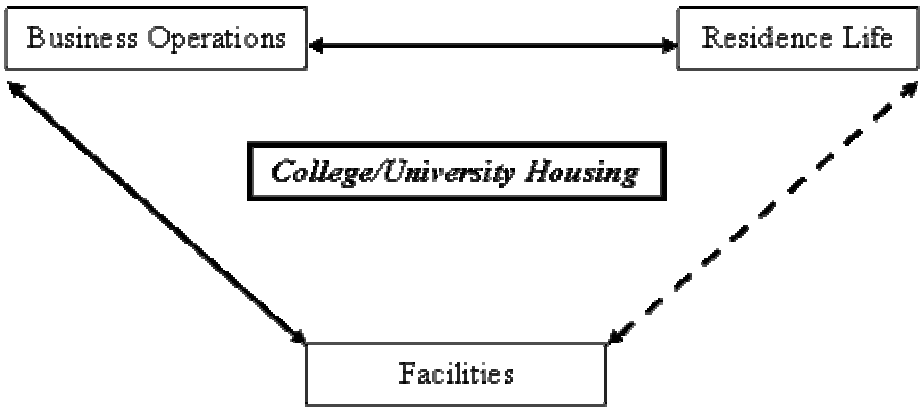

Figure 1. Because the level of interdependence between facilities and residence life components is being examined, it is represented by a dashed line.

It is critical that residence life professionals, who are in these buildings every day, create communication lines with the staff whose primary responsibility is the care and maintenance of the facilities. Attentiveness on the part of the residence life staff can positively impact repair, replacement and upgrade of facilities before deferred maintenance causes costs to increase dramatically (Atkin & Brooks, 2000). As the reader will discover, graduate preparation programs tend to prepare individuals who work in college and university housing through a residence life tract that most directly connects their job functions to their graduate field of study (Richmond & Sherman, 1991). However, there is a point in a housing professional's career when the physical facilities that house the residence life operations must be a priority (Thompson, 2000; Hallenbeck, 1993). Developing an idea of what entry-level and middle manager residence life professionals (hereafter referred to as residence life professionals) do relative to their facilities is important (Barrett & Baldry, 2003).

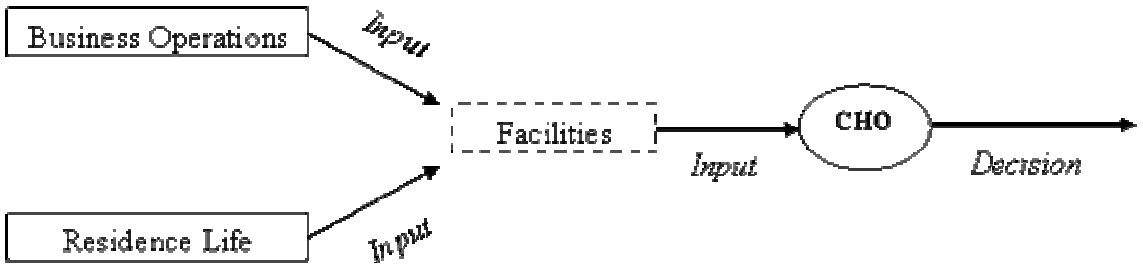

Figure 2. While interdependence of the areas within university housing is critical, everything that occurs within a housing department in some way is connected to, and filtered through, a facilities lens. Whether it is long-term planning for rent rates or the creation of programmatic space for academic partners, the facilities themselves are the filter because they will house the events and provide the revenue for continued departmental operations. Because of this, chief housing officers will filter information through facilities in order to make decisions.

As the reader will discover, the major theme that can be seen in this research surrounds the concept of time as it relates to the professional position. Time is the common element in the demographics of Position Status and Years in Current Position. Each of these demographics had 14 statistically significant correlations to Independent behavior. It is time in the position that affords the residence life professional the opportunities to grow in his or her role. While good communication is critical between facilities staff members and residence life staff members (Rondeau, Brown & Lapides, 1995), this level of communication does not occur overnight. It must be formed over time. This level of communication becomes critical as staff members work to address the needs of dynamic facilities in need of repair, renovation or new construction (Crosson, 2004). The ability to address those issues of unplanned maintenance quickly and in cost-effective ways is not learned quickly by residence life professionals. It is the passage of time that is required for these skills to be developed.

A residence life professional's desire to be a chief housing officer might motivate him or her to engage in particular behaviors; however, engaging in them effectively is a different matter. Many graduate preparation programs might focus on relationship building as an important work function (CAS, 2003), the effectiveness of that communication must be at its peak in order for workplace productivity to be maximized (Shumake, 1992). This sentiment is also echoed by Rondeau, Brown and Lapides (1995).

In my first professional position, I was asked to reduce the enormous amount of vandalism that had occurred in my residence hall during the previous year. In an effort to regain institutional control of the facility, I began a routine of Monday-morning walking tours conducted with the building's maintenance staff member as well as representatives from the custodial staff. During this process, I began to see the benefits of forming relationships with the facilities staff in an effort to accomplish departmental goals within a facility.

During the first summer in my current position, I joined a building tour with my department's director. It was during this tour that I saw that facilities and their management were important to him. At the time, my job description did not outline the management of facilities in the way it currently does. However, based on that experience, I realized an expectation existed for me to manage those facilities in a way that was congruent with the ideals put forth by the director on that building tour. While I might have engaged in certain behaviors on my own, I would have engaged in other behaviors because of the understood expectations communicated from that one experience. Those expectations, however, were not outlined in the same way in my job description. It was from those experiences and an understanding of those behaviors that this study took root.

From those experiences and subsequent discussions, multiple questions emerged. Do the job responsibilities of residence life professionals provide them opportunities to gain facilities-related experience? Are expectations regarding facilities-related behaviors written into job descriptions? Are supervisors providing their professionals with expectations that allow them to gain these experiences? Are residence life professionals exhibiting these behaviors independent of supervisor expectations or job requirements?

Purpose of the Study

The purpose of this research was to study residence life professionals' behaviors related to facilities issues. It was hoped that this study would demonstrate the level of interdependence between the staff in residence life and staff in facilities operations found in most housing operations. Behavior was determined by examining the response information provided by participants within three factors (Relationship, Awareness and Involvement) of behavior and across three scales (Independent, Expected and Required) of behavior. Participant demographic information was then examined in conjunction with Independent behaviors to determine if relationships between the two existed and if so, to determine the strength of those relationships. If trends could be discovered through any existing correlations, it was hoped that the field of college and university housing would be able to benefit from a greater understanding of these relationships.

CHAPTER 2

Current Trends

In reviewing the existing literature, an obvious trend was observed. The literature, particularly from the Association of College and University Housing Officers – International (ACUHO–I), reflected that the facilities unit of a housing department was important to students. However, there was very little discussion about how residence life professionals, those who often work most directly with students, fit into that aspect of housing operations (Clodfelter, Furr & Wachoviak, 1984; Conroy, 1982; Kern & Rentz, 1991; Simono, Wachoviak & Furr, 1984).

The Council for the Advancement of Standards in Higher Education (CAS, 2003) outlines what it deems necessary for Housing and Residential Life Programs (HRLPs) regarding facilities management. It states that in order for an HRLP to be effective, structured management functions that include planning, property management, contract administration and financial control must be maintained. The standards provide more specific direction for the area of property management by stating that procedures should be designed to ensure a proper return value for money spent within the methods utilized for its management. Particular attention is paid to the skill sets related to the areas of accountability, particularly in maintaining a property's value, among others.

Additionally, there are CAS Standards for Master's level graduate preparation programs. In the section outlining curriculum, the standards discuss three major categories that must be included: foundational studies, professional studies and supervised practice. The specific areas that make up professional studies include "student development theory; student characteristics

and the effects of college on students; individual and group interventions; organization and administration of student affairs and; assessment, evaluation and research (p. 294)."

In reviewing the program-related standards, an individual would be hard pressed to see where an understanding and awareness of facilities fits into the constructed curriculum. Since the CAS Standards for HRLPs indicate that an awareness of physical facilities is critical but do not include that in the preparation program-related standards, one is left to surmise that this knowledge is to be gained through on-the-job training. Because of this omission, it then becomes important to understand what particular facilities-related behaviors individuals engage in and how they come to learn them.

Physical facilities and their impact on students have been discussed in relevant literature for quite some time. For example, Whittington (1974) wrote about a renovated residence hall, complete with a before and after comparison of the features within the facility. "Decisions can be made after consideration of input from past experience, professional advice from architects and engineers, and from students living in existing residence halls" (p. 22). While not a recent article, it was significant that residence life professionals were absent from his list of individuals who provided feedback.

Bishop discussed the changing role of a housing administrator from its earlier origins. As time has progressed, the responsibilities of the administrator have changed as the scope of administrators' jobs has expanded (1981). Those changes can be observed in more detail by examining the progression of literature outlined in this review. There is a progression in the literature from Whittington's article to future articles which call upon professionals to define facilities management as well as understand the impact facilities have on the business of housing (Hallenbeck, 1993). With this acknowledgement of expanding roles, additional literature

suggests that housing professionals need to expand their area of awareness and knowledge of the physical facilities. Several articles illustrate the importance of facilities and their impact on students; however the arguments do not connect residence life professionals' responsibilities and the importance of facilities (Clodfelter, Furr & Wachoviak, 1984; Conroy, 1982; Kern and Rentz, 1991; Simono, Wachoviak & Furr, 1984). If, as the literature states, the functions of residence life professionals are changing, are residence life professionals adapting to meet them? While it is nowhere explicitly stated that one of the expanding roles of the residence life professional is the physical facilities, it is the author's assertion that this is a necessary expansion of responsibility for the residence life professional. Since these staff members are in the facilities every day, they can impact the care and management of facilities which can have a tremendous impact on the development of residents. While no single piece of literature outlines a path or series of behaviors, connecting the multiple pieces of literature leads the researcher to this conclusion.

The ACUHO-I Standards (2003) outline the behaviors that housing professionals should engage in as part of a set of ethical standards. These behaviors included the areas of developmental programs for housing staff, the maintaining of relationships with staff members in a climate of, among other things, interdependence, the use of assessment to continually improve programs and procedures, the development of greater knowledge bases in order to create new programs and services and the recognition that formal training and practical experience are important for preparing individuals for full-time work as housing professionals. Any of these areas can have a connection to facilities at one point or another during a housing professional's career.

In keeping with the idea of expanding responsibilities, Dunn and Grandpré (2001) highlighted the importance of facilities audits for housing departments. The importance of possessing an understanding and knowledge of facilities is critical. Barrett and Baldry (2003) reiterated the importance of the facility assessment because they believed buildings support an organization's goals. Barrett and Baldry asserted that most organizations have more information regarding photocopiers in their buildings than of the buildings themselves.

The training in human development theory that many individuals receive in graduate preparation programs lends itself to the work of residence life. Richmond and Sherman (1991) noted that 33 percent of graduate assistantships, internships and practicum experiences had some connection with residence life for the students who held an assistantship. They also noted that residence life was the predominant area in which individuals worked after completion of their graduate programs. Since these individuals' experience and training have been primarily in residence life, from where does the initial understanding of facilities come for new professionals entering the field? If they are not receiving this training in the formal curriculum, where, if at all, are they receiving it? There is very little recent literature related to this topic making it difficult to ascertain where, how and if current graduate students are receiving training related to physical facilities.

Anchors (1993) highlighted the need for residence life staff to respond quickly to a wide range of institutional decisions, such as financial challenges, while maintaining a high ethic of fiscal responsibility. He asserted that all of this had to be accomplished while keeping departmental goals in mind. Focusing solely on the educational/programming portion of a housing department is a short-sighted approach. To maintain fiscal soundness, a broad understanding of housing operations is critical. Given the assertion that the expanded

responsibilities of residence life professionals now include the area of facilities, the question then becomes how to define facilities management in a way that allows residence life professionals to understand its meaning and, in turn, how to be effective in their roles as facilities managers.

Grimm (1986) asserted that facilities management is a balance between construction, maintenance, renovation and professional development in order for programs to be successful. Effective facilities management impacts housing departments in financial ways, thus making it important for residence life professionals to have at least a basic understanding of facilities and building infrastructure. Grimm's statement further supported the importance of residence life professionals' having an awareness of facilities. With increased understanding on the part of residence life staff, the ability of housing departments to be sound fiscal managers extends beyond budget sheets and into the residence halls.

How then can the importance of facilities be imparted to individuals who might not have received specific training on them? It is important to consider and understand the typical training and education of residence life professionals in order to help them understand the impact facilities can have on student development. In order for students living in residence halls to be successful, they must have basic needs satisfied. These basic needs include a need for safety and comfort (Maslow, 1954). When Maslow's theory of needs is applied to a residence hall, it follows that residence life professionals must take ownership of the facilities in order to meet the most basic needs of the students living in the residence halls. Some might argue that the awareness of and responsibility for facilities does not fall to residence life professionals, but instead are the responsibility of the facilities professionals. However, based on the training in human development that many residence life professionals received in their graduate preparation programs, the importance of meeting these basic needs for safety and comfort should be apparent

to them, particularly from a developmental perspective. Without these basic needs being met, further student development cannot be facilitated.

While this connection was made by the author, Hallenbeck (1993) made the connection more directly. Hallenbeck focused his attention to, what he referred to as, the other two legs that form the tripod of housing operations. Similar to the ACUHO-I Standards, Hallenbeck viewed housing department as an interdependent entity. He focused on the idea of housing operations as a business enterprise requiring individuals to have the ability to carry out policy and budget-related decisions with a keen awareness of their financial implications. He cited those professionals who began their careers in the areas of programming and resident education as viewing facilities management as a "necessary evil" of the profession (p. 221). He also provides a summary of the overarching assumption behind this study. "Without question, however, if buildings are not properly maintained, little higher-order development is likely to occur. Consequently, facility management is an essential housing function" (p. 221).

Understanding this crucial connection between meeting the needs of students and the ability to achieve long-term business goals is critically important according to Thompson (2000). Thompson contended that housing professionals are not properly trained with regard to their understanding of facilities-related issues. He wrote that the typical career track is in the area of programming. The extent of a housing professional's training in the area of facilities is when they receive the keys to their buildings and are told they are in charge A phenomenon then occurs; as professionals reach a point when further advancement is impossible due to the lack of a facilities knowledge base, they either leave the profession or learn about facilities. With this research, examining the current behaviors of residence life professionals might lead to better training protocols for staff as well as improved facilities for students. With improvements in

training and expansion of the facilities-related knowledge base for residence life professionals, the potential exists to increase the career longevity of residence life professionals in the field of housing.

Residence life professionals must seek to acquire knowledge regarding facilities in order to maintain and improve them. This is possible, according to Barrett and Baldry (2003). They asserted that the lack of facilities awareness stemmed from individuals practicing what they termed, "unwanted" behaviors. According to Barrett and Baldry, individuals must ask questions, suggest ideas, explore alternatives, take risks and experiment. They must also be open to changing their own behaviors to work in already existing systems. Individuals must use mistakes as opportunities to learn, talk about learning and take responsibility for their own learning and development. Most importantly, they stated that individuals must admit to what they do not know and to their mistakes. In order to become more familiar with the process of facilities management, residence life professionals must be empowered to learn. How does this happen? Studies have shown that those with past experience with construction tended to be more comfortable in dealing with outside resources such as contractors and architects (Barrett & Baldry, 2003). Those without previous experience tended to see discussions dominated by those resources. This is critical when the time comes for building renovation or new construction when a residence life perspective is needed with regard to facilities. This idea can be applied to residence life professionals that have no prior experience with facilities management. In order to gain experience, they must seek it out or have facilities-related learning opportunities presented to them.

Facilities Management Defined

McGregor and Then (1999) defined facilities as the infrastructure that supports people in an organization in an effort to achieve business goals. Facilities, they contended, are tools to be used to help meet those goals. The idea of housing operations as a business enterprise is the focus of Hallenbeck's article (1993). Any attempt to view housing operations only from the residence life perspective will lead to ineffective management. From this premise, taking a business perspective approach is appropriate.

In their definition of facilities management, Atkin and Brooks (2000) outlined eight critical issues that must be considered: (1) a proper application of facilities management techniques is required in order for organizations to provide the right environment in a cost effective way to conduct their business; (2) a standard definition is needed for facilities management, which they argue is the organization's method of operating, maintaining, improving and adapting facilities so they more effectively support organizational goals and objectives; (3) if an organization does not manage its facilities, the facilities will begin to impact the organization's performance; (4) facilities management covers an extensive range of services (real estate management, financial management, change management, human resources management, safety and contract management, as well as budget management); (5) no universal approach exists when it comes to managing facilities even within the same business; (6) the quality of services offered is critical when attempting to define value for a facility; (7) savings cannot be looked at in isolation from value and because of this, organizations must demonstrate what they are getting for their money, and (8) organizations must examine all possible options and adopt those which are most likely to achieve further value with regard to facilities.

The need for a clear understanding of facilities management is critical. Based on these definitions, facilities management is broadly defined and includes several significant management-level issues. An effective manager of facilities must know the purpose of the facility as well as the revenues and expenses associated with it. It is also important for that individual to feel as if seeking new information regarding facilities and expanding his or her own knowledge base regarding facilities-related issues is supported.

CHAPTER 3

Methodology and Research Questions

The target population for this survey was entry-level professionals and middle managers working in the residence life units of college and university housing departments. Entry-level professionals were defined as any professional staff member who held a position considered to be the first full-time position without requiring previous full-time experience to hold the position. Middle managers were defined as any professional staff member who held a position considered to be a step above an entry-level position on the organizational chart of that housing department. Middle managers might have supervised entry-level professionals or graduate level staff members.

Research Instrument Creation and Design

According to Borg and Gall (1989), there are eight steps in the creation and use of a research instrument. Steps one through five focus on the creation of the instrument while steps six through eight focus on data collection and analysis. The first step for this study was to examine conclusions that might have been reached from previous research. Because no research examples similar to this study could be found, this research could not be started in that manner.

Step two requires a rationale for the instrument. In this study, that rationale was provided by the researcher's own past experiences and by individuals who have experience in the fields of university housing, student affairs, construction and maintenance. Step three is the development of questions or predictions. Because this instrument was not intended to predict behavior, only observe and examine it, the questions that were developed were from those conversations with

the aforementioned professionals. Their thoughts about the behaviors that made residence life professionals successful when dealing with facilities drove the formation of the questions.

Step four is the overall design of the study. Because these professionals had common themes in their discussions, the factors of Relationship, Awareness and Involvement emerged. This, combined with the researcher's intent to ascertain whether these behaviors which occurred were Independent, Expected or Required, formed the scales of behavior. Finally, step five is the collection of data. This instrument was piloted at the regional level using a paper version of the survey (Pennington, 2004). For the most recent study, data were collected on an international level; therefore, a web based platform was most appropriate. The reader will discover in more detail the process of instrument creation for this study below. The research instrument, designed for a previous study, was the Residence Life Staff Facilities-Related Behavior Inventory (Appendix A1 & A2). Initial reliability information on the scales of behavior was positive as indicated in Tables 1, 2 and 3.

Table 1

Pilot Survey Factor Reliability

		Cases		
Factors	Items	Valid	Excluded	α
Relationship	30	84	16	.824
Awareness	27	86	14	.817
Involvement	33	92	8	.873

Table 2

Pilot Study Survey Scale Reliability

Behavior Scale	Valid Cases	Excluded Cases	Items	α
Independent Behavior	86	14	30	.840
Expected Behavior	81	19	30	.898
Required Behavior	79	21	30	.845

Table 3

Pilot Study Reliability Scoring of Factors by Individual Behavior Scales

		Behavior Scales								
		Independent			Expected			Required		
		Cases			Cases			Cases		
Factors	Items	Valid	Excluded	α	Valid	Excluded	α	Valid	Excluded	α
Relationship	10	91	9	.599	86	14	.682	86	14	.677
Awareness	9	88	12	.501	88	12	.734	88	12	.567
Involvement	11	92	8	.800	92	8	.873	89	11	.826

When gathering reliability information on the scales across all three factors, the total number of items examined was 30. Because of the increased number of cases, variance in the reliability score was not as greatly impacted, as were the reliability scores of the factors which had ten, nine and 11 items examined, respectively. Any small variance in the factor data impacted their alpha coefficients more than a variance across scales. As seen in Table 3, when

the number of cases was increased, the alpha coefficient also increased because each factor was examined across all three scales, thus tripling the number of cases examined for each factor.

The Cronbach's alpha (indicated as α in the tables) has a range of 0.00 to 1.00. The Cronbach's alpha can be used to measure the reliability of instruments with dichotomous scoring as well as instruments made up of items with three or more possible values (Huck, 2000).

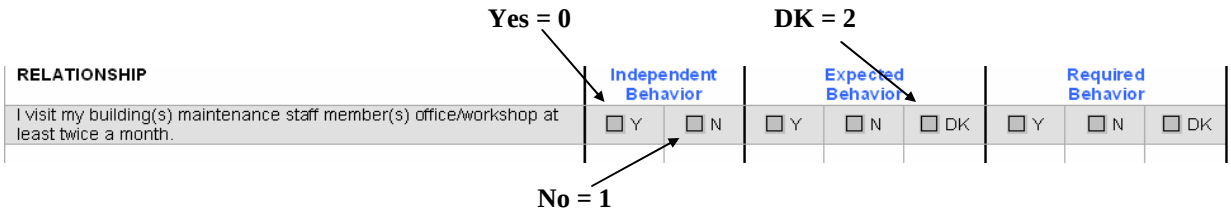

Figure 3. In the Residence Life Staff Facilities-Related Behavior Inventory, Independent responses were dichotomous, being coded as 0 or 1 while Expected and Required behaviors are coded as 0, 1 or 2 for the pilot study. Because a web survey software program was utilized for this study, Independent behavior was coded 1 or 2 while Expected and Required behaviors were coded 1, 2 or 3 by the program.

Instrument Creation

The first step toward creating a behavior measurement instrument was to begin discussions with professionals working in the field of university housing (Borg & Gall, 1989). These individuals had varying professional experiences as well as facilities-related backgrounds.

The professionals, all working at the University of Georgia at the time, consulted for instrument creation and their positions were: Dr. James Day, Executive Director of Housing; Dr. John Schramski, Director of Residential Facilities; Mr. John Ayoob, Assistant Vice President for Student Affairs; Mr. Joel Eizenstat, University Housing Project Manager; Mr. Richard Gibson, Director of Residence Hall Education and Services and; Mr. Steven Smith, Structural

Maintenance Foreperson. A list of their professional experiences in the areas of student affairs, housing/residence life and maintenance/facilities can be found in Table 4. As can be seen, their combined experiences were numerous and varied.

Table 4

Summary of Professional Resource Experience

	Years of Experience		
Resource	Student Affairs	Housing/Residence Life	Maintenance/Facilities
Ayoob	23	21	16
Day	34	34	32
Eizenstat	1.5	1.5	25
Gibson	19	19	14
Schramski	6.5	6.5	12
Smith	5	5	30
Total	89	87	129

During each conversation, the professionals were asked the question, "What, in your experience, has made residence life professionals successful when it comes to dealing with facilities-related issues?" Three common themes emerged, which formed the impetus for the Residence Life Staff Facilities-Related Behavior Inventory.

Relationship.

Relationship was a theme evidenced in several meetings. "How would a split system work? What effect does having maintenance work done by the university's physical plant have on the relationship with residence life and maintenance" (J. Ayoob, personal communication,

February 20, 2004)? While this question helped add a demographic component to the survey, it also indicated that the facilities and residence life relationship could potentially be impacted by the level of access residence life professionals have in the area of facilities. "In-house" or "hybrid" maintenance systems potentially provide a residence life professional with more opportunities to form relationships with maintenance professionals than split systems. Ayoob also stated, "Remember that personal interactions outside of work are a good indicator of relationship. Involvement in celebrations to recognize maintenance staff members can be an indicator of relationship." Ayoob's statement asserted that deeper levels of relationship are necessary for successful collaborations to occur. By developing positive working relationships, greater levels of understanding are achieved between residence life professionals and facilities staff. This mutual understanding of the mission or goals of the other staff creates a more effective partnership. By being able to know and understand the other staff members' goals and objectives, individuals might tailor their own behavior to work more effectively with each other.

Relationship was not only a topic of importance for Ayoob, but for others as well. "The frequency of interaction with the maintenance staff needs to be high" (S. W. Smith, personal communication, February 18, 2004). Smith's observation of instances where interaction between facilities and residence life professionals had been minimal provided a new path to follow as questions began to be developed for the theme of relationship.

Awareness.

"Are concerns being communicated to the maintenance staff or the other way around" (Smith, 2004)? If it is a common practice that residence life professionals are only receiving information regarding their facilities from the maintenance staff rather than providing information, it might be assumed by the facilities staff that a lower level of awareness is present

on the part of the residence life staff members regarding facilities-related issues. Smith also believed that residence life professionals should be more proactive when it comes to issues of facilities.

Ayoob's previous question regarding the maintenance system also addressed a level of awareness (2004). Awareness might be impacted if the residence life staff member has more or less access. An interest in or previous experiences with facilities on the part of the residence life staff member affects the level of awareness of facilities (J. H. Eizenstat, personal communication, February 19, 2004). The level of awareness and relationship an individual experiences with facilities-related issues and staff leads to a third and final theme of the survey instrument.

Involvement.

Eizenstat's question regarding previous experience with facilities addressed the idea of awareness. It also addressed the idea of involvement. Eizenstat stated that an indicator of involvement could also be determined by examining the residence life staff member's behavior during a maintenance-related crisis situation. He asserted that a high level of involvement exists when the residence life staff member stays with a facilities-related crisis event until it is resolved rather than abandoning it to the facilities staff members when they arrive on the scene.

Finally, Schramski (personal communication, March 4, 2004) asserted that looking at the decision-making ability of the residence life staff member could indicate levels of involvement as well. He asserted that residence life professionals with the ability to make decisions regarding a facilities-related issue have a higher level of involvement than those without that same capacity.

Instrument Format and Design

Other housing professionals provided a significant amount of feedback regarding demographic information to be collected and the overall flow and appearance of the survey. Use of the ACUHO-I directory for gathering institutional demographics allowed the researcher to collect data as documented by the institution rather than as perceived by the participant. The researcher could get exact institutional enrollment numbers, housing capacity and percentage of students housed rather than approximations that might be provided by the participant (J. F. Day, personal communication, March 8, 2004 & R. L. Gibson, personal communication, February 17, 2004).

Finally, rather than respondents reading each question three times and answering according to the scales of the survey, the survey was formatted to include the question only once with the scales being separated across the page providing the look of the current instrument. It was also determined that rather than provide individuals with a Likert scale for responses, a forced choice survey was more appropriate, particularly since the questions concerned behaviors and whether or not specific behaviors take place as well as expectations and requirements and whether those have or have not been presented to the participant (J. F. Day, personal communication, March 8, 2004).

Further Instrument-Supporting Literature

The issues of communication and collaboration are crucial in the area of facilities management. These areas are also important to gaining a better understanding of the behavior of new professionals in relation to facilities. This understanding is supported in several ways in facilities-related literature. According to Crosson (2004), the traditional methods of monitoring facilities were one-time assessments and the creation of a specific budget to partner with the

same assessment, with the intent that the budget remains fixed through the lifetime of the facility. Essentially, a static budget was partnered with the dynamic workings of a facility. Crosson contended that fixed budgets for facilities are no longer possible for several reasons, among them, technology. The use of technology to monitor buildings and their performance on an up-to-the-minute basis has made the idea of a static budget obsolete. Budgetary allocations must be flexible to meet the needs, or lack of needs, of the facilities. Current building assessment methods must be approached as an ongoing cycle. Because the issues of a particular facility are ever changing, continual communication is critical to stay abreast of facilities-related issues.

Regarding face-to-face communication, Shumake states that it "must be accommodated if workplace maximization is to be accomplished" (1992, p 128). Rondeau, Brown and Lapides (1995) also highlight the importance of communication, stating that "Good communication among senior managers, facility management staff and the facility maintenance managers and staff, other supporting departments, and facility users (e.g., clients, visitors, and customers) is an important aspect of successful maintenance and operations" (1995, p 541).

Rondeau, Brown and Lapides (1995) also asserted that maintenance in the day to day operations of a business is critical to success. The condition of a facility, because of the value of real estate, is dependent upon upkeep. They stated that maintenance must fall in line with the corporate strategy and meet two goals. The first goal is the assurance that clients, customers and employees are able to visit or work in a certain type of location and environment. The second is targeting the financial performance of the property itself. In other words, the physical structure is assigned a value, thus creating goals for its performance in the overall scheme of success for the business enterprise. While the actual value of a building might not be applicable to someone

working at a state institution, the cost of maintenance and upkeep compared with the revenue generated by the building is important as it impacts the bottom line of the budget report. Further, the physical structure of the facility impacts the goals of the organization in serving its stakeholders.

It is with these theoretical perspectives in mind that the Residence Life Staff Facilities-Related Behavior Inventory was developed. The instrument consists of three factors: Relationship, Awareness and Involvement, with ten, nine and 11 questions in each factor, respectively. All questions are responded to across three different scales of behavior: Independent, Expected and Required. Participants provide a total of 90 responses.

The first response to each question addresses the individual facilities-related behavior of the survey participant. The second response is intended to measure facilities-related behavior connected to supervisor expectations, whether oral or written. The third response is intended to measure facilities-related behavior associated with job requirements as outlined by the subject's position description.

The housing department's program emphasis was also important for this study. There are three categories of program emphasis: a) student development; b) student learning, and c) student services. Program emphasis definitions are those defined by Ender, Newton and Caple (1996). The student services model says that the purpose of student affairs work is to provide support for the academic mission of the academy by providing numerous adjunctive services, such as admissions, counseling, student activities, financial aid, etc. The student learning model says that student affairs should emphasize shared efforts with other educators to achieve a more integrated or 'seamless' learning environment. Outcomes of this model are primarily related to intentional learning, academic assistance and an enhanced academic climate. The student

development model says that student affairs should focus on the human maturation process from birth to death. Professionals focus on developmental tasks that students experience. The theoretical perspectives (physical, person-environment, cognitive, typological, etc.) form the criteria for decision making concerning programming on campus.

In light of the literature and the contention that a greater understanding of facilities is crucial for residence life professionals, 12 questions were developed to guide this research.

1. What are the "Independent" facilities-related behaviors of residence life professionals?
2. What are the "Expected" facilities-related behaviors of residence life professionals?
3. What are the "Required" facilities-related behaviors of residence life professionals?
4. What is the relationship between full-time residence life experience and "Independent" behavior?
5. What is the relationship between an individual's time in his or her current position and "Independent" behavior?
6. What is the relationship between ultimate career goal and "Independent" behavior?
7. What is the relationship between sex and "Independent" behavior?
8. What is the relationship between whether a person selects chief housing officer as a possible career option and "Independent" behavior?
9. What is the relationship between the perceived departmental emphasis and "Independent" behavior?
10. What is the relationship between the perceived departmental maintenance system and "Independent" behavior?
11. What is the relationship between the highest attained degree by an individual and "Independent" behavior?

12. Is there any correlation between individual questions across scales of behavior (Independent to Expected, Expected to Required and Independent to Required)?

Independent of the aforementioned research questions, information would be collected regarding reliability information for the survey. Reliability information from this research study can be found in Table 5.

Supporting Data

Utilizing the Statistical Package for the Social Sciences (SPSS), version 13, phi-correlations were run against demographic and question responses in order to determine the strength of those relationships. Demographics included: (a) sex, (b) ultimate career aspirations, (c) years of full-time residence life experience, (d) years in current position, (e) total on-campus population, (f) total institution enrollment, (g) current institution type [public/private], (h) perceived structure of physical plant [in-house/outsourced/both], (i) position status [entry-level/middle-manager], (j) current departmental program emphasis, and (k) whether chief housing officer was a possible career option.

There were three possible types of physical plant operations from which subjects could choose. They were "outsourced," "in-house" and "both." For the purpose of this study, "outsourced" physical plants were defined as individuals who enter the residence halls to conduct maintenance and facilities-related repairs but do not directly report to the housing department. The individuals might be part of the university's physical plant. An "outsourced" physical plant operation does not indicate that a private contractor is used, as "outsourced" commonly denotes. While it could be applied in this situation, for the purpose of this study, any maintenance program not under the umbrella of the housing department was considered "outsourced." In-house physical plants were defined as individuals who enter the residence

halls to conduct maintenance and facilities-related repairs and who report directly to the housing department. Because some housing departments utilize a system that blends "in house" and "outsourced" systems, subjects had the option of indicating so by selecting "both."

After completing the design and construction of the survey instrument, the researcher sent the instrument to five entry-level professionals and five mid-manager level professionals in the housing department at his campus. Test subjects were asked to complete the survey noting the amount of time it took to complete the survey, the ease with which the survey was completed, the clarity or lack of clarity of directions, the ease with which operational definitions were understood. Finally, test subjects were asked if the instrument allowed them to answer the questions the survey was intended to find the answer to based on the survey's purpose statement. Of the ten test subjects who were given the practice survey, six completed the survey and electronically submitted feedback. The average reported time to complete the survey was 11.5 minutes. The minimum and maximum times to complete the survey were seven minutes and 13 minutes, respectively. Initial peer review of the instrument was positive. Common themes regarding concerns surrounded issues of the forced-choice format of the survey. In reflecting on their own behavior, some reviewers indicated a desire to answer in a manner other than "yes" or "no." The request for more "check all that apply" options was also made.

Instrument Reliability Information

Instrument reliability information was gathered utilizing phi-correlations in multiple ways to examine overall instrument reliability, factor reliability and scale reliability. Overall factor reliability was determined by utilizing phi-correlations to determine a Cronbach's alpha (α) for all questions in each factor across all three scales of behavior within that factor. Reliability scoring was also run on factors for particular scales of behavior to provide more

specific reliability information for the instrument. Table 6 indicates those scores for each factor by particular scale of behavior as well as an aggregate reliability score for the instrument.

Table 5

Instrument Reliability Data

		Behavior Scale				
		Independent	Expected	Required	All Scales	
Factor	Items	α	α	α	Items	α
Relationship	10	.717	.812	.895	30	.919
Awareness	9	.737	.732	.802	27	.898
Involvement	11	.868	.855	.886	33	.940
All Factors	30	.901	.910	.935	90	.966

Overall reliability scoring on the survey was positive, particularly in the sub-scale rating. As those items were fewer than the aggregate scoring, variances would tend to be reflected more heavily in the α values of each correlation score. However, since the highest value a correlation can receive is 1.00, these scores reaffirm the efficacy of the survey instrument as a tool.

Population and Sampling Procedure

After receiving support from the Association of College and University Housing Officers – International, a body of text was sent from ACUHO-I to the 778 chief housing officers (CHOs) in the organization's directory (Appendix B). The text described the operational definitions of entry-level and middle manager level residence life professionals. Chief housing officers were asked to first determine if they wished for their department to participate in the research study. If

they decided to participate, they then sent the researcher the electronic mail addresses of the residence life professionals at their institutions. Data collection began on March 15, 2006.

Upon receiving notification from a chief housing officer of his or her desire to participate in the study, the researcher then composed a separate electronic message to the residence life professionals identified by the CHO (Appendix C). These individuals were sent an electronic message that "blind copied" them so that other individuals receiving the message could not view other electronic mail addresses but allowed the researcher to send multiple electronic messages at one time. By April 3, 2006, the researcher had sent a total of 398 invitations to participate in the study to individual residence life professionals. On that same date, those 398 professionals received an electronic mail reminder from the researcher encouraging them to complete the survey if they had not already done so.

There were several anomalies of note. While the researcher asked that chief housing officers respond, in some instances a designate of the CHO responded. This was to be expected because of the varied types of housing operations, particularly if a chief housing officer received the initial invitation from the researcher and then forwarded that communication to a director or assistant director of residence life. In some instances, the researcher received communication from individual residence life professionals who had been instructed by the chief housing officer to contact the researcher if they wanted to participate in the study. One residence life professional replied on behalf of other professionals. That individual, after explanation of the research protocol, provided the researcher with the electronic mail addresses of colleagues expressing interest in participating in the research. One chief housing officer responded with only a list of names of residence life professionals from his or her department. Because no signature file was included at the bottom of that electronic mail communication, the researcher

used the URL extension on the electronic mail message, pasted it into the location bar of an internet search engine, and was taken to what ended up being that particular institution. Utilizing that institution's web site, the researcher did a name-by-name search for those individuals and subsequently sent them the electronic message inviting them to participate in the study.

On April 14, 2006, all those individuals previously contacted by the researcher were notified again of the research study and reminded that data collection would commence on April 21, 2006 (Appendix D). During the last week of data collection, the researcher was contacted by another chief housing officer and provided the names of residence life professionals from that institution eligible to participate in the study. Due to the later nature of this communication, the researcher sent a final reminder to only those individuals on April 20, 2006. The text of this electronic communication was identical to that sent on April 14, 2006 (Appendix D).

At 3p.m. on April 21, 2006, the researcher's web site and survey were taken down. All data were electronically transmitted to the researcher. Using the data collected, the researcher then coded the institutional demographic information using the 2005 ACUHO-I Directory. Institution type (public/private), total enrollment and housing capacity were collected using the directory. After this information was input into the data set, the researcher then deleted three columns of data from the data set: a) record number, b) survey submission date, and c) institution name. This information was copied from its originally transmitted form of Microsoft Excel and pasted in SPSS 13.0.

Statistical Analyses

Research questions one through three concern general facilities-related behaviors of residence life professionals. This response information can be seen in Tables 11, 12 and 13. Research questions four through 11 concerns any possible relationships that exist between the

Independent behaviors of residence life professionals and their demographic responses. Since the demographic information and Independent behaviors had multiple and dichotomous responses, respectively, phi-correlations were run to test the strength of those relationships. These correlation values are represented in Table 16 with those values that are significant at the .05 level indicated by an "*". Research question 12 is answered in Table 28.

CHAPTER 4

Results and Analyses

Demographic Analysis

Seven hundred and seventy-eight chief housing officers received invitations to participate in the research study. A total of 423 electronic messages were sent to residence life professionals identified by the participating chief housing officers, their designees or even to individual residence life professionals who were referred to the researcher by their chief housing officer, inviting them to participate in the research. Of the 423 initial invitations, 203 residence life professionals from 56 institutions in the contiguous United States and Canada completed surveys for a 48.23% return rate. Of the participants completing the survey, 90 identified themselves as male (44.3%) while 112 identified themselves as female (55.2%). One respondent did not provide information regarding sex. Of those respondents, 161 (79.3%) were from public institutions while 38 (18.7%) were from private institutions. Of the 56 participating institutions, 43 were public and 13 were private. Four respondents did not provide the name of their institutions which prevented institutional demographics from being included in those responses. Their response data, however, were left in the data set for analysis of provided information.

Forty-one respondents (20.2%) indicated working in departments using a Student Services model, while 77 (37.9%) and 85 (41.9%) indicated working in Student Learning and Student Development models, respectively. Respondents were varied in the way they determined their Departmental Emphasis, even those from the same institution. Of the 41 institutions that had multiple respondents, only 12 (29.3%) provided consistent responses to this

question in that all respondents from the same institution identified the same Departmental Emphasis model for their departments.

Of those responding to the demographic, 45 (22.7%) stated that their department utilized an outsourced maintenance system. Seventy-two (35.5%) indicated in house maintenance services while 84 (41.4%) reported utilizing a hybrid system. As with Departmental Emphasis, response data were examined for consistent responses regarding the Maintenance Service utilized at each institution. Of the 41 institutions with multiple respondents, 17 (41.5%) institutions had consistent responses among all staff members regarding the type of maintenance operation utilized by that department.

Of the total respondents, 123 (60.6%) identified as entry-level professionals, while 80 (39.4%) identified as middle managers. There were no anomalies in the position status response information. There appears to be a professional bottleneck in the field of college and university housing, just as in many other professions. The number of entry-level positions is greater than middle manager positions. The number of middle manager positions is greater than those at the upper management level. The number of upper management level positions exceeds the number of chief housing officer positions. It is in this bottleneck that training in facilities or lack of training will impact an individual's ultimate career path and whether he or she persists in the field of college and university housing.

In Table 6, respondents indicated a wide variety of possible career goals. In any of the careers listed, a vital understanding of facilities will be necessary. Many of these residence life professionals will move through the ranks of college and university administration. Almost 71% of survey respondents felt that a position as a chief housing officer was a possible career option. Approximately 84% of entry-level respondents completing the survey held a master's degree.

Table 6

Ultimate Career Goal

Position	Frequency
Uncertain	58 (28.9%)
Director (Any Area)	56 (27.9%)
Dean of Students	34 (16.9%)
Vice President (Any Area)	29 (14.4%)
Outside Higher Education	17 (8.5%)
President	7 (3.5%)

By examining the career-related demographic information, more information regarding respondents' possible career futures could be examined. While a total of 143 (71.5%) respondents indicated being a chief housing officer was a possible career option, it was also noted that a total of 58 (28.9%) respondents indicated they were uncertain of their ultimate career goal. Seventeen more respondents saw their possible career goals leading them away from higher education all together. This is a total of 74 (37%) out of 200 respondents either being uncertain of their ultimate career goal or having the potential to leave student affairs altogether. This seemed to indicate that many individuals might have already determined that their ultimate career is outside the field of college and university housing as well as outside higher education, particularly since the majority of survey respondents were entry-level professionals.

To combine demographic information for easy review, Tables 7, 8 and 9 examine multiple demographics. Table 7 examines Highest Attained Degree and Position Status. Table 8

examines Full-Time Residence Life Experience and Position Status. Finally, Table 9 examines Years In Current Position and Position Status.

Table 7

Highest Attained Degree by Position Status

	Highest Attained Degree					
Position Status	Professional	Bachelor's	Master's	Doctorate	Other	Total
Entry-level	1 (0.5%)	18 (9%)	102 (50.7%)	0	0	121 (60.2%)
Mid-Manager	1 (0.5%)	6 (3%)	65 (32.3%)	5 (2.5%)	3 (1.5%)	80 (39.8%)
Total	2 (0.1%)	24 (11.9%)	167 (83.1%)	5 (2.5%)	3 (1.5%)	

Table 8

Full-Time Residence Life Experience and Position Status

	Full Time Residence Life Experience					
Position Status	< 3	3-5	5-7	7-9	10+	Total
Entry-level	77 (38.1%)	33 (16.3%)	9 (4.5%)	2 (0.1%)	1 (0.5%)	122 (60.4%)
Mid-Manager	1 (0.5%)	13 (6.4%)	25 (12.4%)	14 (6.9%)	27 (13.4%)	80 (39.6%)
Total	78 (38.6%)	46 (22.8%)	34 (16.8%)	16 (7.9%)	28 (13.9%)	

Table 9

Years in Current Position and Position Status

	Years In Current Position					
Position Status	< 3	3-5	5-7	7-9	10+	Total
Entry-level	94 (46.5%)	26 (12.9%)	2 (0.1%)	0	0	122 (60.4%)
Mid-Manager	40 (19.8%)	12 (5.9%)	13 (6.4%)	4 (2%)	11 (5.4%)	80 (39.6%)
Total	134 (66.3%)	38 (18.8%)	15 (7.4%)	4 (2%)	11 (5.4%)	

As shown in the preceding tables there is a general decline in the number of staff members in the entry-level position status for both Full-Time Residence Life Experience as well as in Years in Current Position. These trends, while understandable and explainable, seem to indicate that individuals are remaining in entry-level positions for a very limited time. The rate of decline from entry-level professionals moving into the next stage of their career is sizable.

Response Data

The primary purpose of this study was to examine the behaviors of residence life professionals related to their facilities and the staff members working in them. In order to do this, the general response information had to be analyzed with the intent of looking for "consistent" and "inconsistent" responses. For the purpose of this study, a "consistent" response is identified if each behavior's overall majority responses are the same across all three scales. For example, if Independent, Expected and Required behaviors all have a majority "yes" response across all three scales, the response is deemed "consistent". The same would be said if all three behaviors had a majority "no" response across all scales. Because all responses were the same, they are termed "consistent."

There are also definitions associated with the "inconsistent" responses: "positive" and "negative." If responses are found to be "consistent," it indicates that Independent behavior is congruent with the Expected and Required behaviors, whether receiving a majority "yes" or "no" response. Because of this, "consistent" responses are not studied any further after they are identified. However, the "inconsistent" responses do receive further study. When examining "inconsistent" responses, the manner in which they are "inconsistent" determines whether they are termed "positive" or "negative" in their inconsistency. If the Independent behavior has a majority "no" response while Expected and/or Required behaviors have a majority "yes" response, this would be considered a "negative, inconsistent" question. It is termed "negative" because it potentially indicates that an individual is not meeting his or her expectations or requirements as outlined by supervisors or job descriptions. If, in similar fashion, the Independent behavior has a majority "yes" response while Expected and Required behaviors have a majority "no" response, this is an example of a "positive, inconsistent" response. It indicates that the individual might be acting above and beyond his or her expectations and requirements.

Research questions 1, 2 and 3 dealt with general behaviors in which residence life professionals were engaged. Table 10 answers Research question 1 regarding Independent behavior. Table 11 answers Research question 2 regarding Expected behavior. Finally, Table 12 answers to Research question 3 regarding Required behavior. All are rank ordered by the "yes" responses in descending order.

Table 10

Independent Behaviors of Residence Life Professionals

	Question	Y	N
A3	I am aware of current maintenance concerns in my building(s).	194 (98%)	4 (2%)
R2	I introduced myself to my building(s) maintenance staff member(s) when I began my current position.	188 (95.9%)	8 (4.1%)
A2	I submit maintenance requests.	187 (95.4%)	9 (4.6%)
I1	I make suggestions regarding maintenance operations for the building(s) I am responsible for.	177 (89.8%)	20 (10.2%)
R5	I have contact with maintenance staff members regarding my building(s) at least twice a month.	172 (86.4%)	27 (13.6%)
I10	I maintain involvement in maintenance/facilities related crisis situations until a resolution is found.	168 (86.2%)	27 (13.9%)
R9	I know something about my building(s) maintenance staff member(s) unrelated to the work setting.	158 (78.6%)	43 (21.4%)
A9	I am aware of future renovation, maintenance or new construction projects for building(s) I am/will be responsible for.	156 (79.2%)	41 (20.1%)
R8	I know the first and last name of my building(s) maintenance staff member(s).	137 (68.5%)	63 (31.5%)

Table 10 (continued)

	Question	Y	N
A4	I set maintenance related standards of quality in my building(s) equal to or above minimum departmental standards.	135 (68.9%	61 (31.1%)
R6	I plan events that recognize my building(s) maintenance staff member(s).	130 (65.7%)	68 (34.3%)
R1	I visit my building(s) maintenance staff member(s) office/workshop at least twice a month.	110 (55%)	90 (45%)
R4	I utilize my building(s) maintenance staff member(s) to assist in the training of my staff.	107 (54.3%)	90 (45.7%)
R10	I participate in regularly scheduled meetings with my building(s) maintenance staff member(s).	107 (54.6%)	89 (45.4%)
I8	I make suggestions regarding new constructions projects that I will be responsible for.	106 (54.1%)	90 (45.9%)
A8	I inspect vacant rooms in the building(s) I am responsible for to find maintenance issues to be resolved.	105 (54.1%)	89 (45.9%)
A7	I am aware of costs of current and pending maintenance/renovation/new construction projects in my building(s).	97 (51.1%)	93 (48.9%)
R3	I requested a building tour when I began my current position with my building(s) maintenance staff member(s).	86 (43%)	114 (57%)

Table 10 (continued)

	Question	Y	N
I7	I make suggestions regarding the maintenance/facilities budget for my building(s).	82 (41.8%)	114 (58.2%)
I6	I close rooms/wings/floors for maintenance related issue.	71 (36.8%)	122 (63.2%)
I2	I make decisions regarding maintenance operations for the building(s) I am responsible for.	65 (33.3%)	130 (66.7%)
I4	I am part of teams that oversee renovation projects that would be considered capital improvements.	55 (28.1%)	141 (71.9%)
A5	I receive and review budget information regarding facilities on a regular basis.	52 (26.4%)	145 (73.6%)
I11	I make “punch list” inspections after renovation/new construction projects are complete.	50 (25.8%)	144 (74.2%)
R7	I have interactions outside of the work setting with my building(s) maintenance staff member(s).	48 (24.1%)	151 (75.9%)
I9	I am part of teams that oversee new construction projects that I will be responsible for.	44 (22.6%)	151 (77.4%)
A1	I conduct a walk-through with my building(s) maintenance staff member(s) at least twice a month.	43 (21.8%)	154 (78.2%)
I5	I create long-term maintenance plans for my building(s).	29 (14.7%)	168 (85.3%)

Table 10 (continued)

	Question	Y	N
I3	I coordinate the maintenance operations for the building(s) I am responsible for.	27 (13.7%)	170 (86.3%)
A6	I make adjustments to spending in areas I control after reviewing maintenance budget information.	24 (12.2%)	172 (87.8%)

Table 11

Expected Behaviors of Residence Life Professionals

	Question	Y	N	DK
A3	I am aware of current maintenance concerns in my building(s).	177 (91.7%)	13 (6.7%)	3 (1.6%)
R2	I introduced myself to my building(s) maintenance staff member(s) when I began my current position.	159 (80.7%)	23 (11.7%)	15 (7.6%)
A2	I submit maintenance requests.	155 (80.3%)	34 (17.6%)	4 (2.1%)
I10	I maintain involvement in maintenance/facilities related crisis situations until a resolution is found.	144 (73.5%)	47 (24%)	5 (2.6%)
I1	I make suggestions regarding maintenance operations for the building(s) I am responsible for.	135 (68.2%)	49 (24.7%)	14 (0.5%)
A9	I am aware of future renovation, maintenance or new construction projects for building(s) I am/will be responsible for.	126 (79.2%)	57 (29.2%)	12 (6.2%)

Table 11 (continued)

	Question	Y	N	DK
R5	I have contact with maintenance staff members regarding my building(s) at least twice a month.	124 (63.3%)	56 (28.6%)	16 (8.2%)
R10	I participate in regularly scheduled meetings with my building(s) maintenance staff member(s).	98 (50%)	90 (45.9%)	8 (4.1%)
A8	I inspect vacant rooms in the building(s) I am responsible for to find maintenance issues to be resolved.	90 (46.2%)	94 (48.2%)	11 (5.6%)
A4	I set maintenance related standards of quality in my building(s) equal to or above minimum departmental standards.	81 (41.3%)	85 (43.6%)	29 (14.9%)
R8	I know the first and last name of my building(s) maintenance staff member(s).	79 (40.7%)	90 (46.4%)	25 (12.9%)
R1	I visit my building(s) maintenance staff member(s) office/workshop at least twice a month.	78 (40%)	99 (50.8%)	18 (9.2%)
R4	I utilize my building(s) maintenance staff member(s) to assist in the training of my staff.	70 (36.3%)	109 (56.5%)	14 (7.3%)
R6	I plan events that recognize my building(s) maintenance staff member(s).	69 (35.9%)	106 (55.2%)	17 (8.9%)
R3	I requested a building tour when I began my current position with my building(s) maintenance staff member(s).	64 (33.5%)	109 (57.1%)	18 (9.4%)

Table 11 (continued)

	Question	Y	N	DK
A7	I am aware of costs of current and pending maintenance/renovation/new construction projects in my building(s).	63 (32.5%)	115 (59.3%)	16 (8.2%)
I7	I make suggestions regarding the maintenance/facilities budget for my building(s).	62 (31%)	128 (64%)	10 (5%)
I8	I make suggestions regarding new constructions projects that I will be responsible for.	62 (31.6%)	125 (63.8%)	9 (4.6%)
I6	I close rooms/wings/floors for maintenance related issue.	50 (25.6%)	138 (70.8%)	7 (3.6%)
I2	I make decisions regarding maintenance operations for the building(s) I am responsible for.	49 (24.9%)	135 (68.5%)	13 (6.6%)
A5	I receive and review budget information regarding facilities on a regular basis.	48 (24.5%)	139 (70.9%)	9 (4.6%)
I4	I am part of teams that oversee renovation projects that would be considered capital improvements.	44 (22.6%)	141 (72.3%)	10 (5.1%)
A1	I conduct a walk-through with my building(s) maintenance staff member(s) at least twice a month.	37 (18.7%)	145 (73.2%)	16 (8.1%)
R9	I know something about my building(s) maintenance staff member(s) unrelated to the work setting.	36 (18.8%)	138 (71.9%)	18 (9.4%)
I9	I am part of teams that oversee new construction projects that I will be responsible for.	34 (17.8%)	150 (78.5%)	7 (3.7%)

Table 11 (continued)

	Question	Y	N	DK
I11	I make "punch list" inspections after renovation/new construction projects are complete.	31 (15.8%)	152 (77.6%)	13 (6.6%)
I3	I coordinate the maintenance operations for the building(s) I am responsible for.	22 (11.2%)	168 (85.7%)	6 (3.1%)
I5	I create long-term maintenance plans for my building(s).	22 (11.3%)	170 (87.2%)	3 (1.5%)
A6	I make adjustments to spending in areas I control after reviewing maintenance budget information.	20 (10.4%)	161 (83.6%)	11 (6.2%)
R7	I have interactions outside of the work setting with my building(s) maintenance staff member(s).	7 (3.7%)	172 (90.5%)	11 (5.8%)

Table 12

Required Behaviors of Residence Life Professionals

	Question	Y	N	DK
A3	I am aware of current maintenance concerns in my building(s).	167 (84.3%)	25 (12.6%)	6 (3%)
A2	I submit maintenance requests.	130 (66.7%)	56 (28.7%)	9 (4.6%)
I10	I maintain involvement in maintenance/facilities related crisis situations until a resolution is found.	120 (60.6%)	62 (31.3%)	16 (8.1%)

Table 12 (continued)

	Question	Y	N	DK
A9	I am aware of future renovation, maintenance or new construction projects for building(s) I am/will be responsible for.	84 (42.6%)	87 (44.2%)	26 (13.2%)
R2	I introduced myself to my building(s) maintenance staff member(s) when I began my current position.	82 (42.3%)	88 (45.4%)	24 (12.4%)
R5	I have contact with maintenance staff members regarding my building(s) at least twice a month.	77 (40.1%)	91 (47.4%)	24 (12.5%)
R10	I participate in regularly scheduled meetings with my building(s) maintenance staff member(s).	72 (36.9%)	107 (54.9%)	16 (8.2%)
I1	I make suggestions regarding maintenance operations for the building(s) I am responsible for.	70 (41.7%)	69 (41.1%)	29 (17.3%)
A8	I inspect vacant rooms in the building(s) I am responsible for to find maintenance issues to be resolved.	69 (35.2%)	110 (56.1%)	17 (8.7%)
A4	I set maintenance related standards of quality in my building(s) equal to or above minimum departmental standards.	57 (29.7%)	107 (55.7%)	28 (14.6%)
I7	I make suggestions regarding the maintenance/facilities budget for my building(s).	46 (28.1%)	139 (69.9%)	14 (7%)
A7	I am aware of costs of current and pending maintenance/renovation/new construction projects in my building(s).	45 (22.8%)	134 (68%)	18 (9.1%)

Table 12 (continued)

	Question	Y	N	DK
A5	I receive and review budget information regarding facilities on a regular basis.	42 (21.3%)	143 (72.6%)	12 (6.1%)
I8	I make suggestions regarding new constructions projects that I will be responsible for.	42 (21.3%)	138 (70.1%)	17 (8.6%)
I6	I close rooms/wings/floors for maintenance related issue.	40 (20.5%)	146 (74.9%)	9 (4.6%)
R3	I requested a building tour when I began my current position with my building(s) maintenance staff member(s).	38 (19.4%)	131 (66.8%)	27 (13.8%)
I2	I make decisions regarding maintenance operations for the building(s) I am responsible for.	38 (20%)	137 (71.7%)	16 (8.4%)
R8	I know the first and last name of my building(s) maintenance staff member(s).	36 (18.7%)	131 (67.9%)	26 (13.5%)
I4	I am part of teams that oversee renovation projects that would be considered capital improvements.	36 (18.1%)	155 (77.9%)	8 (4%)
R1	I visit my building(s) maintenance staff member(s) office/workshop at least twice a month.	33 (16.9%)	136 (69.7%)	26 (13.3%)
I9	I am part of teams that oversee new construction projects that I will be responsible for.	30 (15.3%)	154 (78.6%)	12 (6.1%)
R4	I utilize my building(s) maintenance staff member(s) to assist in the training of my staff.	27 (14.3%)	141 (74.6%)	21 (11.1%)

Table 12 (continued)

	Question	Y	N	DK
R6	I plan events that recognize my building(s) maintenance staff member(s).	27 (14.2%)	141 (74.2%)	22 (11.6%)
I11	I make "punch list" inspections after renovation/new construction projects are complete.	27 (13.6%)	152 (76.4%)	20 (10.1%)
I3	I coordinate the maintenance operations for the building(s) I am responsible for.	24 (12.2%)	165 (84.2%)	7 (3.6%)
A6	I make adjustments to spending in areas I control after reviewing maintenance budget information.	18 (9.2%)	164 (83.7%)	14 (7.1%)
I5	I create long-term maintenance plans for my building(s).	18 (9.1%)	174 (88.3%)	5 (2.5%)
A1	I conduct a walk-through with my building(s) maintenance staff member(s) at least twice a month.	17 (8.8%)	151 (77.8%)	26 (13.4%)
R9	I know something about my building(s) maintenance staff member(s) unrelated to the work setting.	13 (6.7%)	164 (85%)	16 (8.3%)
R7	I have interactions outside of the work setting with my building(s) maintenance staff member(s).	5 (2.6%)	171 (90.5%)	13 (6.9%)

An analysis of general response data in the Independent scale of behavior leads to an interesting discovery. The Relationship factor of Independent behavior had nine out of 10 questions with a majority "yes" response. The Awareness factor of Independent behavior had only six out of nine questions with a majority "yes" response. Finally, in the Involvement factor of Independent behavior, only four out of 11 questions had a majority "yes" response. This

indicated that residence life professionals do well at building relationships; however, when it comes to awareness of their facilities and then further involvement, their engagement in the behaviors discussed in the survey declines. Of the 30 items on the instrument, 16 responses across the behavior scales were consistent. This provides the best indicator that professionals within the field are incorporating those interpersonal and communication skills learned in graduate preparation programs into their work for the purposes of relationship building (CAS, 2003). However, it also speaks to Thompson's (2000) point regarding the lack of awareness and involvement in facilities.

When general response information was examined, consistent responses were deemed as positive. By consistent, the responses are majority "yes" or "no" across all scales of behavior for each question. It is when deviations occurred and responses were inconsistent that further analysis was conducted. Table 13 is the consistent responses which indicated that appropriate behavior was occurring in that expectations and requirements were being met by survey respondents. Table 14 contains the inconsistent responses. Again, for the purpose of quick visual reference, majority "no" responses are shaded gray in both tables.

Table 13

Consistent Survey Responses

		Independent		Expected			Required		
	Question	Y	N	Y	N	DK	Y	N	DK
R3	I requested a building tour when I began my current position with my building(s) maintenance staff member(s).	86	114	64	109	18	38	131	27

Table 13 (continued)

	Question	Independent Y	Independent N	Expected Y	Expected N	Expected DK	Required Y	Required N	Required DK
R7	I have interactions outside of the work setting with my building(s) maintenance staff member(s).	48	151	7	172	11	5	171	13
A1	I conduct a walk-through with my building(s) maintenance staff member(s) at least twice a month.	43	154	37	145	16	17	151	26
A2	I submit maintenance requests.	187	9	155	34	4	130	56	9
A3	I am aware of current maintenance concerns in my building(s).	194	4	177	13	3	167	25	6
A5	I receive and review budget information regarding facilities on a regular basis.	52	145	48	139	9	42	143	12
A6	I make adjustments to spending in areas I control after reviewing maintenance budget information.	24	172	20	161	11	18	164	14
I1	I make suggestions regarding maintenance operations for the building(s) I am responsible for.	177	20	135	49	14	70	69	29
I2	I make decisions regarding maintenance operations for the building(s) I am responsible for.	65	130	49	135	13	38	137	16

Table 13 (continued)

	Question	Independent		Expected			Required		
		Y	N	Y	N	DK	Y	N	DK
I3	I coordinate the maintenance operations for the building(s) I am responsible for.	27	170	22	168	6	24	165	7
I4	I am part of teams that oversee renovation projects that would be considered capital improvements.	55	141	44	141	10	36	155	8
I5	I create long-term maintenance plans for my building(s).	29	168	22	170	3	18	174	5
I6	I close rooms/wings/floors for maintenance related issue.	71	122	50	138	7	40	146	9
I7	I make suggestions regarding the maintenance/facilities budget for my building(s).	82	114	62	128	10	46	139	14
I9	I am part of teams that oversee new construction projects that I will be responsible for.	44	151	34	150	7	30	154	12
I10	I maintain involvement in maintenance/facilities related crisis situations until a resolution is found.	168	27	144	47	5	120	62	16

Table 13 (continued)

	Question	Independent Y	Independent N	Expected Y	Expected N	Expected DK	Required Y	Required N	Required DK
I11	I make "punch list" inspections after renovation/new construction projects are complete.	50	144	31	152	13	27	152	20

The remaining 14 questions represented inconsistent responses from survey participants. These questions did not have the same majority response across behavior scales. Important to note is that of the inconsistent responses, all of them had a majority "no" response indicated in the Required behavior scale and majority "yes" responses from the Independent behavior scale.

Table 14

Inconsistent Survey Responses

	Question	Independent Y	Independent N	Expected Y	Expected N	Expected DK	Required Y	Required N	Required DK
R1	I visit my building(s) maintenance staff member(s) office/workshop at least twice a month.	110	90	78	99	18	33	136	26
R2	I introduced myself to my building(s) maintenance staff member(s) when I began my current position.	188	8	159	23	15	82	88	24

Table 14 (continued)

	Question	Independent Y	Independent N	Expected Y	Expected N	Expected DK	Required Y	Required N	Required DK
R4	I utilize my building(s) maintenance staff member(s) to assist in the training of my staff.	107	90	70	109	14	27	141	21
R5	I have contact with maintenance staff members regarding my building(s) at least twice a month.	172	27	124	56	16	77	91	24
R6	I plan events that recognize my building(s) maintenance staff member(s).	130	68	69	106	17	27	141	22
R8	I know the first and last name of my building(s) maintenance staff member(s).	137	63	79	90	25	36	131	26
R9	I know something about my building(s) maintenance staff member(s) unrelated to the work setting.	158	43	36	138	18	13	164	16
R10	I participate in regularly scheduled meetings with my building(s) maintenance staff member(s).	107	89	98	90	8	72	107	16
A4	I set maintenance related standards of quality in my building(s) equal to or above minimum departmental standards.	135	61	81	85	29	57	107	28

Table 14 (continued)

	Question	Independent Y	Independent N	Expected Y	Expected N	Expected DK	Required Y	Required N	Required DK
A7	I am aware of costs of current and pending maintenance/renovation/new construction projects in my building(s).	97	93	63	115	16	45	134	18
A8	I inspect vacant rooms in the building(s) I am responsible for to find maintenance issues to be resolved.	105	89	90	94	11	69	110	17
A9	I am aware of future renovation, maintenance or new construction projects for building(s) I am/will be responsible for.	156	41	126	57	12	84	87	26
I8	I make suggestions regarding new constructions projects that I will be responsible for.	106	90	62	125	9	42	138	17

Independent Behavior Correlations

Research questions 4 through 11 concerned Independent behavior with demographic information provided by respondents. While the research questions were asked in a particular order, the summary information is provided in order of greatest to least statistically significant correlations. Many of the research questions to be answered as part of this study involved determining if relationships existed between the Independent behaviors that participants were exhibiting and particular demographics. These correlations can be found in Table 15.

Table 15

Correlation Values of Independent Behavior and Demographics

Question	DE	IT	MS	HAD	SEX	PS	FTRLE	YICP	UCG	CHO
R1	.090	.049	.185	.209	.161	.072	.183	.349*	.243	.143
R2	.194	.116	.129	.159	.347*	.097	.194	.267	.310	.074
R3	.098	.112	.214	.204	.085	.186*	.252	.353*	.206	.102
R4	.096	.066	.182	.163	.091	.132	.192	.282	.227	.141
R5	.053	.070	.212	.341*	.204	.193*	.242	.348*	.250	.079
R6	.158	.188*	.090	.174	.109	.216*	.270	.245	.249	.455*
R7	.109	.204*	.209	.227	.071	.082	.279	.391*	.167	.116
R8	.111	.136	.189	.161	.182	.199*	.301*	.386*	.252	.148
R9	.077	.060	.213	.133	.195	.131	.299	.413*	.355*	.075
R10	.111	.054	.170	.175	.067	.124	.271	.248	.291	.090
A1	.082	.191*	.107	.226	.059	.105	.208	.251	.264	.167
A2	.095	.116	.129	.112	.109	.122	.221	.323*	.224	.067
A3	.049	.127	.081	.218	.075	.103	.222	.353*	.391*	.149
A4	.237*	.056	.197	.199	.161	.045	.198	.098	.234	.131
A5	.076	.087	.158	.226	.157	.297*	.343*	.295	.240	.068
A6	.081	.067	.132	.290	.196	.269*	.391*	.349*	.299	.373*
A7	.119	.125	.143	.164	.176	.206*	.281	.208	.309	.129
A8	.229*	.082	.139	.191	.094	.149	.204	.242	.353*	.085
A9	.121	.044	.115	.133	.201	.157	.259	.230	.343*	.228*
I1	.135	.079	.096	.272	.071	.113	.245	.257	.278	.234*

Table 15 (continued)

Question	DE	IT	MS	HAD	SEX	PS	FTRLE	YICP	UCG	CHO
I2	.084	.027	.190	.228	.089	.218*	.276	.286	.281	.086
I3	.198	.073	.067	.367*	.123	.124	.271	.370*	.367*	.037
I4	.097	.019	.202	.218	.160	.342*	.430*	.409*	.293	.047
I5	.046	.090	.138	.216	.123	.310*	.414*	.419*	.326*	.054
I6	.014	.146	.096	.153	.115	.050	.228	.227	.274	.066
I7	.040	.066	.126	.228	.127	.204*	.296	.328*	.339*	.089
I8	.138	.072	.170	.152	.160	.196*	.390*	.324*	.317	.109
I9	.076	.028	.156	.230	.188	.246*	.267	.243	.346*	.108
I10	.104	.044	.167	.162	.186	.062	.174	.255	.309	.037
I11	.199	.057	.183	.197	.075	.261*	.343*	.354	.311	.131

** Indicates significance at the .05 level.*

In order to answer several of the research questions, correlations were run between Independent behavior and each of the demographic questions answered by the respondents. Based on the information gathered from this study, a department's Maintenance System and individuals' Independent behaviors have no correlations of significance ($p < .05$).

The two areas with the greatest number of statistically significant correlations were the demographics of Position Status and Years in Current Position. Each of these demographics had 14 significant correlations with the Independent scale of behavior.

Table 16

Statistically Significant Independent Behaviors to Position Status

	Question	Correlation Value
I4	I am part of teams that oversee renovation projects that would be considered capital improvements.	.342
I5	I create long-term maintenance plans for my building(s).	.310
A5	I receive and review budget information regarding facilities on a regular basis.	.297
A6	I make adjustments to spending in areas I control after reviewing maintenance budget information.	.269
I11	I make "punch list" inspections after renovation/new construction projects are complete.	.261
I9	I am part of teams that oversee new construction projects that I will be responsible for.	.246
I2	I make decisions regarding maintenance operations for the building(s) I am responsible for.	.218
R6	I plan events that recognize my building(s) maintenance staff member(s).	.216
A7	I am aware of costs of current and pending maintenance/renovation/new construction projects in my building(s).	.206
I7	I make suggestions regarding the maintenance/facilities budget for my building(s).	.204

Table 16 (continued)

	Question	Correlation Value
R8	I know the first and last name of my building(s) maintenance staff member(s).	.199
I8	I make suggestions regarding new constructions projects that I will be responsible for.	.196
R5	I have contact with maintenance staff members regarding my building(s) at least twice a month.	.193
R3	I requested a building tour when I began my current position with my building(s) maintenance staff member(s).	.186

Research question 5 is answered in Table 17. There were 14 statistically significant correlations between Years In Current Position and Independent behavior. They are ranked below in order of their respective levels of significance.

Table 17

Statistically Significant Independent Behaviors to Years In Current Position

	Question	Correlation Value
I5	I create long-term maintenance plans for my building(s).	.419
R9	I know something about my building(s) maintenance staff member(s) unrelated to the work setting.	.413

Table 17 (continued)

	Question	Correlation Value
I4	I am part of teams that oversee renovation projects that would be considered capital improvements.	.409
R7	I have interactions outside of the work setting with my building(s) maintenance staff member(s).	.391
R8	I know the first and last name of my building(s) maintenance staff member(s).	.386
I3	I coordinate the maintenance operations for the building(s) I am responsible for.	.370
A3	I am aware of current maintenance concerns in my building(s).	.353
R3	I requested a building tour when I began my current position with my building(s) maintenance staff member(s).	.353
R1	I visit my building(s) maintenance staff member(s) office/workshop at least twice a month.	.349
A6	I make adjustments to spending in areas I control after reviewing maintenance budget information.	.349
R5	I have contact with maintenance staff members regarding my building(s) at least twice a month.	.348
I7	I make suggestions regarding the maintenance/facilities budget for my building(s).	.328

Table 17 (continued)

	Question	Correlation Value
I8	I make suggestions regarding new constructions projects that I will be responsible for.	.324
A2	I submit maintenance requests.	.323

Of the 14 questions with significant responses, there was overlap in eight pairings that the same questions had significant correlations for these two demographics. Although correlation does not indicate cause, it is critical to note that on a 30-item survey, two demographic categories had significant correlations with almost half (46.7%) of the Independent behavior responses.

Table 18

Statistically Significant Independent Behavior Overlapping Between Position Status and Years In Current Position Rank Ordered by Position Status

		Correlation Value	
	Question	PS	YICP
I4	I am part of teams that oversee renovation projects that would be considered capital improvements.	.342	.409
I5	I create long-term maintenance plans for my building(s).	.310	.419
A6	I make adjustments to spending in areas I control after reviewing maintenance budget information.	.269	.349
I7	I make suggestions regarding the maintenance/facilities budget for my building(s).	.204	.328

Table 18 (continued)

	Question	Correlation Value PS	YICP
R8	I know the first and last name of my building(s) maintenance staff member(s).	.199	.386
I8	I make suggestions regarding new constructions projects that I will be responsible for.	.196	.324
R5	I have contact with maintenance staff members regarding my building(s) at least twice a month.	.193	.348
R3	I requested a building tour when I began my current position with my building(s) maintenance staff member(s).	.186	.353

Table 19

Statistically Significant Independent Behaviors Overlapping Between Position Status and Years In Current Position Rank Ordered by Years In Current Position

	Question	Correlation Value PS	YICP
I5	I create long-term maintenance plans for my building(s).	.310	.419
I4	I am part of teams that oversee renovation projects that would be considered capital improvements.	.342	.409
R8	I know the first and last name of my building(s) maintenance staff member(s).	.199	.386

Table 19 (continued)

	Question	Correlation Value PS	YICP
R3	I requested a building tour when I began my current position with my building(s) maintenance staff member(s).	.186	.353
A6	I make adjustments to spending in areas I control after reviewing maintenance budget information.	.269	.349
R5	I have contact with maintenance staff members regarding my building(s) at least twice a month.	.193	.348
I7	I make suggestions regarding the maintenance/facilities budget for my building(s).	.204	.328
I8	I make suggestions regarding new constructions projects that I will be responsible for.	.196	.324

The demographic of Ultimate Career Goal had eight statistically significant correlations with Independent behavior (Research question 6). Only one significant correlation occurred in the Relationship factor. Awareness had three significant correlations and the Involvement factor had four significant correlations (Table 20).

Table 20

Statistically Significant Independent Behaviors to Ultimate Career Goal

	Question	Correlation Value
A3	I am aware of current maintenance concerns in my building(s).	.391

Table 20 (continued)

	Question	Correlation Value
I3	I coordinate the maintenance operations for the building(s) I am responsible for.	.367
R9	I know something about my building(s) maintenance staff member(s) unrelated to the work setting.	.355
A8	I inspect vacant rooms in the building(s) I am responsible for to find maintenance issues to be resolved.	.353
I9	I am part of teams that oversee new construction projects that I will be responsible for.	.346
A9	I am aware of future renovation, maintenance or new construction projects for building(s) I am/will be responsible for.	.343
I7	I make suggestions regarding the maintenance/facilities budget for my building(s).	.339
I5	I create long-term maintenance plans for my building(s).	.326

Full-Time Residence Life Experience had seven significant correlations to Independent behavior (Research question 4): one in the Relationship factor, two in the Awareness factor and four in the Involvement factor (Table 21).

Table 21

Statistically Significant Independent Behaviors to Full-Time Residence Life Experience

	Question	Correlation Value
I4	I am part of teams that oversee renovation projects that would be considered capital improvements.	.430
I5	I create long-term maintenance plans for my building(s).	.414
A6	I make adjustments to spending in areas I control after reviewing maintenance budget information.	.391
I8	I make suggestions regarding new constructions projects that I will be responsible for.	.390
A5	I receive and review budget information regarding facilities on a regular basis.	.343
I11	I make "punch list" inspections after renovation/new construction projects are complete.	.343
R8	I know the first and last name of my building(s) maintenance staff member(s).	.301

Chief Housing Officer As Possible Career Option had four statistically significant correlations to Independent behavior (Research question 8). Two of these correlations were associated with the Awareness with Relationship and Involvement each having one significant correlation.

Table 22

Statistically Significant Independent Behaviors to CHO As Possible Career Option

	Question	Correlation Value
R6	I plan events that recognize my building(s) maintenance staff member(s).	.455
A6	I make adjustments to spending in areas I control after reviewing maintenance budget information.	.373
I1	I make suggestions regarding maintenance operations for the building(s) I am responsible for.	.234
A9	I am aware of future renovation, maintenance or new construction projects for building(s) I am/will be responsible for.	.228

While Institution Type was not a research question, it was examined as part of the analyses of the relationships between Independent behaviors and demographic information. Institution Type had three significant correlations. Two occurred in the Relationship factor and one in the Awareness factor. There were no significant correlations in the Involvement factor.

Table 23

Statistically Significant Independent Behaviors to Institution Type

	Question	Correlation Value
R7	I have interactions outside of the work setting with my building(s) maintenance staff member(s).	.204

Table 23 (continued)

	Question	Correlation Value
A1	I conduct a walk-through with my building(s) maintenance staff member(s) at least twice a month.	.191
R6	I plan events that recognize my building(s) maintenance staff member(s).	.188

Departmental Emphasis (Research question 9) and Highest Attained Degree (Research question 11) each had two significant correlations to Independent behavior. Both significant correlations in Departmental Emphasis occurred in the Awareness factor. One significant correlation occurred in the Relationship factor and one in the Involvement factor (Table 24). Of the two significant correlations in Highest Attained Degree, the Relationship and Involvement factors each had one. There were no significant correlations in the Awareness factor for that demographic (Table 25). The demographic of Sex had only one statistically significant correlation to Independent behavior (Research question 7) which occurred in the Relationship factor (Table 26).

Table 24

Statistically Significant Independent Behaviors to Departmental Emphasis

	Question	Correlation Value
A4	I set maintenance related standards of quality in my building(s) equal to or above minimum departmental standards.	.237

Table 24 (continued)

	Question	Correlation Value
A8	I inspect vacant rooms in the building(s) I am responsible for to find maintenance issues to be resolved.	.229

Table 25

Statistically Significant Independent Behaviors to Highest Attained Degree

	Question	Correlation Value
I3	I coordinate the maintenance operations for the building(s) I am responsible for.	.367
R5	I have contact with maintenance staff members regarding my building(s) at least twice a month.	.341

Table 26

Statistically Significant Independent Behaviors to Sex

	Question	Correlation Value
R2	I introduced myself to my building(s) maintenance staff member(s) when I began my current position.	.347

Table 27 provides a summary of the statistically significant correlations between Independent behavior and demographic information sorted by factor. Important to note in Table

27 is that a total of 17 statistically significant correlations occurred in the Relationship factor. Sixteen significant correlations occurred in the Awareness factor and 22 significant correlations occurred in the Involvement factor.

Table 27

Significant Correlations of Independent Behavior and Demographics by Factor

	Factor			
Demographic	Relationship	Awareness	Involvement	Total
Position Status	4	3	7	14
Years In Current Position	6	3	5	14
Ultimate Career Goal	1	3	4	8
Full-Time Residence Life Experience	1	2	4	7
CHO as Possible Career Option	1	2	1	4
Institution Type	2	1	0	3
Departmental Emphasis	0	2	0	2
Highest Attained Degree	1	0	1	2
Sex	1	0	0	1
Maintenance System	0	0	0	0
Total	17	16	22	

Behavior Correlations

In an effort to determine if certain behaviors within one scale were related to behaviors in other scales, a series of correlations were run. These correlations were examined within each factor (Relationship, Awareness and Involvement) and across scales of behavior (Independent,

Expected and Required). By placing the correlation summary table in rank order by percentage, it was discovered that three of the top four correlations, based on percentage, occurred between Expected and Required behaviors.

Table 28

Correlation Summary Information Rank Ordered by Percentage

Factor	Behaviors	Total Correlations	Significant Correlations	Percentage
Relationship	Expected/Required	100	98	98%
Involvement	Expected/Required	121	114	94%
Involvement	Independent/Expected	121	111	92%
Awareness	Expected/Required	81	71	88%
Involvement	Required/Independent	121	116	86%
Awareness	Required/Independent	81	59	73%
Relationship	Independent/Expected	100	71	71%
Awareness	Independent/Expected	81	54	67%
Relationship	Required/Independent	100	62	62%

CHAPTER 5

Research Implications

Study Limitations

Housing departments may be structured in various, nuanced ways making this a potential limitation to the study. The survey might have been completed by individuals who do not work in a housing system exactly described by the demographics regarding the operational definitions of Maintenance Systems in the survey. This might be particularly true in a model that separates "residence life" and "housing" functions. Further, the nature of the type of maintenance system that a department utilizes is self-reported by the survey respondents. Even though a respondent might deem his or her housing department to be in-house, outsourced or a hybrid operation, this is only the respondent's perception of the maintenance system and might not be the actual case.

Because of the lack of pre-existing research, a survey instrument had to be developed for this study. There were no previously developed surveys from which to draw information regarding reliability and validity. However, this web-based study did achieve a 48.23% return rate with each sub scale receiving a α greater than .700. In a previous study conducted utilizing a paper version of this survey (Pennington, 2004), minus one demographic question, a 72.99% return rate was achieved with each sub scale receiving a α greater than .800. The previously collected reliability data as well as the reliability data collected for this study in conjunction with the instrument creation methods outlined by Borg and Gall (1989) do indicate the instrument is sound.

The survey utilized for this study relies on self-reported information from the participants. Because the questions allude to positive behaviors, subjects might have felt more inclined to self-report what they perceived to be positive behaviors. This has the potential to provide skewed data, particularly in the area of Independent behavior, as the response options for the participant are limited to "yes" and "no." Because response options for Expected and Required behaviors allowed participants an opportunity to select "don't know" as a response, participants might have provided what they believed were acceptable responses by opting to indicate "don't know" in these behavior scales rather than marking "no" as a response. Further, because the available responses are limited, the variability for responses was low. It was hoped, however, that the limited responses would force subjects to provide realistic responses regarding their own facilities-related behaviors.

Finally, the survey instrument was utilized at the researcher's home institution for a previous study. Because of this, many professionals who assisted in providing initial instrument feedback had also participated in the pilot study. Some of these same professionals also participated in this study. Those staff members had already seen the instrument and were aware of the purpose of the study. One of those same residence life professionals was also enrolled in the same doctoral program as the researcher, and therefore had more knowledge of the research. This study was also presented at a professional development program for the middle manager staff members in the researcher's department.

General Response Information

The major focus of this research was to examine what behaviors residence life professionals were engaging in with regard to facilities and their facilities staff members. While demographic information provided insights into what influences those behaviors, it was also

fundamentally important to look at the behaviors themselves. Behaviors could not be looked at in isolation of one another. It is helpful to understand the behaviors in their individual scales; however, the interplay of these behaviors is also critical as will be discussed below.

Positive and Negative Inconsistency.

Of the inconsistent responses, Relationship 1, 4, 6, 7, 8, 9; Awareness 4, 7, 8, and Involvement 8 and 9 had majority "no" responses in their Expected behavior scale. It could be inferred from these responses that while job requirements and expectations were not provided to survey respondents, they were engaging in the Independent behavior even though it was not expected or required of them.

Of the inconsistent responses, Relationship 2, 5, 10 and Awareness 9 had majority "yes" responses in the Expected behavior scale. In this version of inconsistent behavior, it can be inferred that while Required behaviors do not exist for these professionals, there is some level of Expected behavior being provided to respondents that caused them to indicate as such on the survey instrument. Based on the operational definition of Expected behavior, this might have been communicated to respondents either verbally or in writing.

Given the number of inconsistent response, it was determined that all of the inconsistencies were "positive" in that all expectations and requirements were being met. Negative inconsistencies would have occurred had Independent behavior had a majority "no" response while Expected and/or Required behavior had majority "yes" responses.

Independent Response Behavior.

In reviewing the general response information, it was observed that individuals tended to do better at behaviors in the Relationship factor by having a majority "yes" responses to nine out of the 10 questions (90.0%) in that factor. That level of success dropped as respondents moved

into the Awareness factor with only six out of the nine questions (66.7%) having majority "yes" responses. As professionals moved into the area of Involvement, only four out of the 11 questions (36.4%) had a majority "yes" response. This successful cultivation of relationships on the part of residence life professionals might be attributed to the constructed curriculum of Master's level graduate programs. If graduate programs receive credit for the ability to cultivate relationships by residence life professionals, might they also receive some blame for these same professionals' lessened awareness and involvement when it comes to facilities?

Demographic Analysis

By asking current residence life professionals to provide demographic information, it was hoped that some relationship or relationships might be observed between their Independent behaviors and those demographics. This study was in no way meant to be predictive of future behaviors; however, the intent was to see if certain characteristics about individuals had stronger relationships to Independent behaviors than others.

Maintenance System and Departmental Emphasis

During the pilot study at the researcher's own institution, he was asked about the consistency of responses from the housing staff members in that department. Those individuals, many of whom had been in their positions for several years, indicated varying types of maintenance systems as well as departmental emphases. During that time, a new paradigm was attempting to stress student learning as the core emphasis for the division and therefore, departmental operations. Based on this discussion, a more in-depth examination of these demographics was conducted for this study.

The level of inconsistency in the responses from staff members from the same institution regarding Departmental Emphasis and Maintenance System raises questions regarding

awareness. The number of institutions with multiple respondents that all self-identified a single maintenance system or a philosophical way of operating was low. However, given the fact that Maintenance System was a demographic with no significant correlations to independent behavior, it would lead an observer to dismiss it as not having any relevance to the manner in which residence life professionals go about their day-to-day work. There is a question of the overall philosophy of a housing department that comes into question in considering Departmental Emphasis. This would have more impact if housing departments train their staff members concerning this area. It must be realized that while many institutions that had multiple respondents did not identify the same Departmental Emphasis or Maintenance System, these might not have been part of their overall training or might not be something that is part of the day-to-day focus of those departments. If this is a focus of training for institutions whose professionals did not answer in a consistent way, that message is not getting through and their training should be reevaluated. Further consideration should be given as to whether it needs to be part of a department's training at all given the low number of correlations that occurred between these demographics and Independent behavior.

A professional in the field of student affairs has an understanding that each of the Departmental Emphasis models outlined by Ender, Newton and Caple (1996) will have different emphases because of the philosophical differences of each model. Because of this, each will offer different things to students based on what each model determines to be important. There are some other important considerations to make based on the data. The demographic of Departmental Emphasis only had two statistically significant correlations to Independent behavior. Therefore, while it is interesting to note that individuals within the same department, more often than not, identified their departmental emphasis differently from each other, the fact

that there were only two significant correlations indicates that it might not be an issue at all. There are two potential reasons that this is notable. The first issue is the possibility that individuals are not making distinctions between the components that form these Departmental Emphases. Since the models shape what a department looks like or offers its students, the question then becomes whether individuals understand them and how they impact a department. Further, it might be asked whether individuals even need to understand these models, particularly since Departmental Emphasis did not have the high number of significant correlations that other demographics had.

Highest Attained Degree

Given the large numbers of Master's degrees held by participants in this study, particularly in entry-level positions, the curriculum in graduate preparation programs becomes even more important; particularly if the Master's degree is perceived to bring with it a certain skill set to new professionals. If the degree is a requirement to hold these positions, the degree as well as the skills it is perceived to provide is critical. If an understanding of facilities-related issues does not come with the degree, are housing and residence life departments making that training part of the process for newly hired professionals? If these departments are not, where does the training occur? Are professionals expected to acquire it in informal ways? Further, what is it about the degree that makes it a critical part of a job requirement as opposed to prior experience? These questions became even more important, particularly when it was noted that Highest Attained Degree only had two statistically significant correlations to Independent behavior. Relationship 5 states, "I have contact with maintenance staff members regarding my building(s) at least twice a month." Involvement 3 states, "I coordinate the maintenance operations for the building(s) I am responsible for." In each of these statements is the connection

that is necessary between the residence life professional and the maintenance staff members. Relationship 5 only ascertains that communication occurs, however; Involvement 3 is an indicator of that level of communication.

As noted in the literature from ACUHO-I (2003), an appreciation for practical experience is essential for housing professionals. Is there too much emphasis being placed on educational degrees rather than consideration being given to an individual's previous experiences? The discussion of whether it is possible for housing departments to achieve the same results without placing the prerequisite of a Master's degree on an individual in order to hold a position might change the landscape of the profession. Departments must then be able to articulate what the perceived required or desirable skill sets are that are connected with the degree as opposed to prior experience or even an individual's capability to learn on the job through structured training protocols.

Institution Type and Sex

Whether an institution was public or private had only three statistically significant correlations to Independent behavior. Two of these occurred in the Relationship factor while one occurred in the Awareness factor. Relationship 6 states, "I plan events that recognize my building(s) maintenance staff member(s)." Relationship 7 states, "I have interactions outside of the work setting with my building(s) maintenance staff member(s)." Awareness 1 states, "I conduct a walk-through with my building(s) maintenance staff member(s) at least twice a month." The Relationship questions have an obvious connection, particularly in the areas of recognition and general familiarity with maintenance staff members. If these areas in the Relationship factor are achieved, the ability of a residence life professional to increase his or her level of awareness is a natural progression.

In the demographic of Sex, only one significant correlation occurred. Relationship 2 states, "I introduced myself to my building(s) maintenance staff member(s) when I began my current position."

Ultimate Career Goal and Chief Housing Officer as Possible Career Option

After Full-Time Residence Life Experience and Years In Current Position, both of which had the highest number of significant correlations with 14, Ultimate Career Goal had the next highest with eight. There were a total of six choices that respondents could select. As I planned this research, the consideration of testing a hypothesis was quickly dismissed as I realized that primary importance needed to be placed on first understanding what behaviors residence life professionals were engaging in when it came to their facilities and the facilities staff members. Relationship 6 states, "I plan events that recognize my building(s) maintenance staff member(s)." Awareness 6 states, "I make adjustments to spending in areas I control after reviewing maintenance budget information." Awareness 9 states, "I am aware of future renovation, maintenance or new construction projects for building(s) I am/will be responsible for." Finally, Independent 1 states, "I make suggestions regarding maintenance operations for the building(s) I am responsible for." It might be presumed that individuals have the ability to adjust budgetary spending only after they obtain a job at a particular level which makes that part of their overall responsibilities. This responsibility or authority might then be presumed connected more closely to those individuals in middle manager roles. The same might also be said of Awareness 9 and Involvement 1.

There are a number of presuppositions that can be inserted here, one primarily from my own previous experience. As a new residence life professional pursuing a Master's degree, my primary exposure to housing operations came from my role as a residence life staff member.

During that time, I began to see the position of chief housing officer as a possible career path, even without a complete understanding of the roles and responsibilities that come with that position. In reflecting back on my desire at that time to be a chief housing officer, I realize it stemmed not from an understanding of the actual responsibilities of a CHO but because of the particular person in the position at my institution. For a new graduate student impacted by a director of housing, it was easy to choose this as a possible career goal without an understanding of what the day-to-day activities and responsibilities of a CHO entailed. Because of this, it is logical to assume that individuals at any level in their professional career might aspire to be a chief housing officer. However; desire without understanding is not likely to shape behavior. The awareness of the responsibilities of the CHO is more likely to shape behavior as evidenced by my own growth and development as a professional. For me, it was not until my second professional position as a middle manager that I had a clearer understanding of the roles and responsibilities of a CHO. Further, it wasn't until this middle manager role that an understanding of the business operations and facilities areas was grasped.

Full-Time Residence Life Experience and Years In Current Position

It is important to note that Position Status and Years In Current Position had the highest number of statistically significant correlations to Independent behavior. The Highest Attained Degree demographic only had two significant correlations. If the degree does not impact behavior as much as the aforementioned demographics, what components of those demographics can be incorporated into training that will provide that same effect on Independent behavior?

Regarding Years In Current Position, if a specific time frame can be found that has a high number of significant relationships with Independent behavior; those qualities that are associated with that length of service must be utilized in training methods for new professionals. This will,

again, create better trained professionals earlier in their careers rather than simply waiting for that behavior to emerge through the course of time. The common theme between Position Status and Years In Current Position is time. While the demographic of Position Status does not have a specific measurement of time associated with it, many middle manager positions do have a requirement related to previous work experience as a part of the job qualifications.

The anecdote of "two years and out" has often been used by residence life professionals when referring to their tenure in their first full-time position. It is evident from the reported sample that if it is not two years, then "three years" is an appropriate substitute. Only 23% of entry-level professionals responding to this survey had been in their current positions longer than three years. A full 50% of middle managers had been in their positions longer than three years with 14% reporting tenure greater than 10 years in their current positions. What is magical about the three-year mark that sees so many entry-level professionals leaving those positions? Is this related to a culture that exists in residence life or do these professionals feel they have learned enough to move on to the next position? The concept of the bottleneck was discussed earlier; however, the disparity of individuals at the entry-level and middle manager levels that had been in their position fewer than three years was staggering. From the first range of time to the second (Less than 3 to 3-5), there was a 35% drop in the number of entry-level professionals persisting while that number increased by 15% for middle managers. The number of entry-level professionals who moved into the third range (3-5 to 5-7) dropped by another 20% and a full 55% from the first range (Less than 3). Again, middle manager persistence rose another 15% from the second to third range for a 30% total increase from "Less than 3" to "5-7" years of service.

These figures raise questions about persistence and why some individuals choose to move up to middle manager roles and continue in the field of college and university housing. Is there an experience that individuals might have that helps determine if they want to stay in college and university housing or even in the field of student affairs? More research should be conducted to find out why those individuals who have persisted in housing have chosen to remain. While the bottleneck effect is a part of any organization simply because of organizational structures, what is it that makes individuals choose to continue in that process? By understanding a potential character trait or experience that a professional might have had that encouraged him or her to persist in the field, training protocols could be developed to provide professionals with the types of experiences that will make them want to stay in those entry-level positions longer. The potential for stable environments must also be tempered with certain philosophical viewpoints that might see the turnover of entry-level professionals as positive and refreshing for residence life staffs. If individuals feel that a culture of learning and expanding of a knowledge base exists, this drastic turnover rate in entry-level professionals might subside. The potential then exists that those entry-level professionals might move to the middle manager roles with a more thorough understanding of housing operations. The current culture seems to indicate that there is an unwritten expectation for individuals to move out of entry-level positions within a fixed amount of time: three years or less according to this study. Is there also an unwritten rule that even movement from one entry-level position to another for a different experience is in some way frowned upon from within the profession, given the responses of the participants?

Behavior Correlations

There is a paradox that appeared when examining Independent behavior from Table 10 against the significant correlation responses found in Table 27. General response information

revealed nine out of 10 Relationship questions with a majority "yes" response. This would seem to indicate, as previously stated, that residence life professionals are skilled at cultivating relationships. However, when Table 27 was examined, it was discovered that the highest number of significant correlations occurred in the Involvement factor. Determining the reason for this is difficult. It is possible that the ability to form positive relationships as indicated by the general response data allows individuals to create the significant relationships in the Involvement factor.

Further Research

While numerous demographic and Independent behavior relationships were identified, more study is needed to determine where the strength in these relationships exists. The demographic questions had as few as two options from which to choose, i.e. Sex; to as many as six, i.e. Ultimate Career Goal. Using the demographic of Sex as the example, a determination needs to be made as to where the strength of the relationship between the Independent behavior and the demographic exists; male, female or in the aggregate data. In similar fashion, each demographic must be split to more accurately determine where the strength of each of these correlations exists.

In future research, not only should Maintenance System and Departmental Emphasis be included, but whether respondents received training in those areas should be included as well. Because of the inconsistent responses from individuals at the same institutions, it is important to know if either of these areas is a focus of training. Further research might also reveal that these demographics are without merit and might be omitted from the survey altogether. On a larger scale, the concept of these models might also be up for further scrutiny, particularly if training for residence life professionals does not include these models by definition but only the

components or behaviors that emerge from them. Future research should also be designed to determine the chief housing officer's perception of the departmental and maintenance models utilized and then compare these perceptions to responses of the residence life professionals from that institution.

Because Position Status had so many significant correlations, and so many respondents, particularly entry-level professionals, held Master's degrees, future research should examine whether individuals in those roles were required to possess those degrees or even have previous work experience to be in those positions. In this way, the efficacy of degrees or previous work experience requirements might be able to be assessed.

Research Implications

By recognizing that professionals are indicating they are engaging in these Independent behaviors, it might be assumed that they at least have a belief that these behaviors are important in order to be successful in their positions. While this study was quantitative, a follow-up qualitative study might be appropriate to see exactly what it was that motivated individuals to engage in these behaviors, particularly if they were not expected or required to do so. For the researcher, the experiences he identified in Chapter 1 of addressing student vandalism issues and the expectation of his director regarding overall facilities took years for him to remember not just as experiences in and of themselves, but also as identifiable moments that shaped and molded his behavior. It seems logical to believe that experiences of this sort are not uncommon; however, the key is finding out what they are as well as the impact they have on those individuals experiencing them.

The participants of this study, entry-level and middle managers, overwhelmingly possessed Master's degrees. Graduate preparation programs must provide more concrete

experiences and training for new professionals regarding the physical facilities. Currently, those standards only provide theoretical frameworks for understanding the facilities as they relate to the overall student environment. More practical methods must be provided in graduate preparation programs that allow students to gain facilities-related knowledge before they become full-time professionals. Professionals will be exposed to facilities-related issues at some point in their career regardless of the functional area within the field of student affairs they may choose. All units on a college or university campus utilize physical facilities in some form or fashion. Further, if position qualifications continue to include possession of a Master's degree as a requirement to hold the position, preparation programs must either provide "hands on" experience in the realm of facilities or demonstrate in concrete examples a theory-to-practice approach of the impact of facilities on student development.

There is a conundrum associated with degree requirements. While this study demonstrated that particular degrees do not have the same impact on Independent behavior as some other demographics, it is unrealistic to assert that this particular degree requirement should no longer be part of job qualifications. As living/learning environments continue to expand and more and more housing departments form partnerships with academic units, it is critical that new professionals have a theoretical understanding of student development. This is yet another reason to assert that graduate preparation programs must change their curriculum to include facilities management.

College and university housing departments should examine the trend demonstrated in this study of the numbers of professionals leaving entry-level positions after two to three years. We must ask why they are leaving those positions and why it is that period of time that signals the departure. Further, to ensure that knowledgeable professionals are moving up to middle

management positions, the field of college and university housing must ensure that those individuals are leaving with the proper skill sets that allow them to be successful in those middle manager roles.

The primary literature in this study was clear that having prior experiences with facilities management allows professionals to be more comfortable in those settings. While professionals must take responsibility for their own learning, it must also be recognized that because of the lack of facilities management education in graduate preparation programs, it may be up to individual housing departments to provide those opportunities for those staff members. The key here is that if those professionals don't know what they should be learning, it may be necessary to guide them until graduate preparation programs include facilities management in their curriculum.

As this study revealed, the most statistically significant correlations between demographics and Independent behavior occurred Years In Current Position and Position Status. College and university housing departments should be willing to examine the qualities that are associated with these demographics and structure their training around them. By doing this, new professionals may be trained in a way that has more of an impact on their Independent behaviors sooner rather than simply waiting until they are in those middle manager positions. Since professionals are leaving entry-level positions within a period of three years, we must assume that they are not acquiring these skills until they enter middle management positions. If college and university housing departments can train their entry-level professionals in a way that gives them the knowledge base usually possessed by middle managers, the potential exists to create better trained entry-level professional quickly. If entry-level professionals can be trained in a way that shapes their Independent behaviors earlier rather than later in their tenure, housing

departments will reap the benefits by having better trained professional for longer periods of time before they depart for those middle manager positions at other institutions.

College and university housing professionals within the field of college and university housing at all levels serve a common stakeholder – students. While residence life staff may work with facilities staff, they may not see the distinctions between the functions of "residence life" and "housing." The idea of "housing" encompasses facilities management and operations. Giving professionals an understanding of the differences in those two areas may help them gain an understanding of the big picture of college and university housing. Being able to do this earlier in their career may help those professionals who are interested in persisting in the field an understanding that allows them to gain experiences in both areas. This will generate more well-rounded professionals who can work in both realms with ease. These professionals will eventually rise within the ranks of college and university housing, thus becoming, potentially, more well rounded chief housing officers. While this serves the field of student affairs, it also benefits the college or university as a whole.

As the focus of this research dealt with interdependence between units within a housing department, it is critical that new professionals in the field of college and university housing be imbued with an understanding of the importance of these relationships, awareness and involvement in the facilities management of a housing department so they no longer perceive it as a necessary evil.

References

Anchors, S. (1993). Considerations for chief housing officers when downsizing residential life organizations. *Journal of College and University Student Housing, 23*(1). 8-12.

Association of College and University Housing Officers – International (2003). Standards for college and university student housing. Columbus, OH: ACUHO-I.

Atkin, B. & Brooks, A. (2000). Total facilities management. Oxford, UK: Blackwell Science Ltd.

Barrett, P. & Baldry, D. (2003). Facilities management: Towards best practice (2nd ed.). Oxford, UK: Blackwell Science Ltd.

Bishop, W. (1981). Trends: Staff and the period of opportunity. *Journal of College and University Student Housing, 11*(1). 3-5.

Borg, W. R. and Gall, M.D. (1989). Educational research: An introduction. (5th ed.) New York, NY: Longman.

Clodfelter, I., Furr, S.R., & Wachowiak, D. (1984). Student living environments and their perceived impact on academic performance. *Journal of College and University Student Housing, 14*(1). 18-21.

Conroy, W.J. (1982). The quality of residence hall life. *Journal of College and University Student Housing, 12*(2). 17-20.

Council for the Advancement of Standards in Higher Education. (2003). The book of professional standards for higher education. (3rd ed.). Washington, DC: CASHE.

Crosson, M. (2004). Stewardship of educational facilities in the 21st century. Association of Physical Plant Administrators. http://www.appa.org/Facilities Manager/articleDetail.cfm?ItemNumber=521.

Dunn, M.S. & Grandpré, E.A. (2001). Facilities audits in student housing: The scope of the process. *Journal of College and University Student Housing, 29*(2). 17-22.

Ender, S.C., Newton, F.B., & Caple, R.B. (1996). Contributions to student learning: Present realities. In S.C. Ender, F.B. Newton, & R.B. Caple (Eds.), Contributing to learning: The role of student affairs, New Directions for Student Services, No. 75. San Francisco: Jossey Bass.

Forrest, S.P. & Schuh, J.H. (1976). The effect of building design on student/resident perceptions. *Journal of College and University Student Housing, 6*(1). 24-29.

Grimm, J.C. (1986). New ideas on facilities management. *Journal of College and University Student Housing, 16*(2). 3-5.

Hallenbeck, D.A. (1993). Business operations and facility management. In R.B. Winston, Jr., S. Anchors & Associates (Eds.), Student housing and residential life. (pp. 203 – 231). San Francisco: Jossey-Bass.

Huck, S.W. (2000). *Reading statistics and research* (3rd ed.). New York: Longman.

Kern, V.L. & Rentz, A.L. (1991). The residential environment and recidivism: Perceptions of first-year students. *Journal of College and University Student Housing, 21*(1). 19-24.

Maslow, A.H. (1954). Motivation and personality. New York: Harper & Row.

McGregor, W. & Shiem-Shin Then, D. (1999). Facilities management and the business of space. London, UK: Arnold.

Pennington, M.B. (2004). Facilities-related behaviors of residence life professionals. Unpublished manuscript, University of Georgia.

Richmond, J., & Sherman, K. (1991). Student development preparation and placement: A longitudinal study of graduate students' and new professionals' experiences. *Journal of College Student Development, 32*(1), 8-16.

Rondeau, E.P., Brown, R.K. & Lapides, P.D. (1995). Facility management. New York: John Wiley & Sons, Inc.

Shumake, M.G. (1992). Increasing productivity and profit in the workplace: A guide to office planning and design. New York: John Wiley & Sons, Inc.

Simono, R.B., Wachowiak, D.G., & Furr, S.R. (1984). Student living environments and their perceived impact on academic performance: A brief follow-up. *Journal of College and University Student Housing, 14*(1). 22-24.

Thompson, G. (2000). The need for facilities management education and training for housing professionals. *Journal of College and University Student Housing, 29*(1), 3-7.

Whittington, T.B. (1974). An evolution of a renovated residence hall. *Journal of College and University Student Housing, 4*(1), 19-22.

APPENDIX A1

RESIDENCE LIFE STAFF FACILITIES-RELATED BEHAVIOR INVENTORY

PURPOSE OF SURVEY

The purpose of this survey is to examine the behavior of residence life staff in relation to their facilities and facilities staff. All questions are intended to measure behavior. The total behavior of the residence life staff member is measured over three sub scales: 1) Relationship; 2) Awareness and; 3) Involvement. All responses are confidential.

OPERATIONAL DEFINITIONS

Renovation: Refers to the refurbishment of already existing facilities.	**Maintenance:** Refers to the day-to-day repairs and upkeep due to normal wear and tear.	**New Construction:** Refers to the creation of facilities that did not previously exist.
Independent Behavior: Refers to your own current behavior, independent of other factors.	**Expected Behavior:** Refers to expectations given to you by your supervisor, either orally or in writing independent of other factors.	**Required Behavior:** Refers to requirements outlined in your position's job description independent of other factors.

DIRECTIONS

Please respond to each of the following statements by checking the appropriate box. Complete all three sections checking only one response for each behavior.

Y = Yes, N = No, DK = Don't Know

RELATIONSHIP	Independent Behavior		Expected Behavior			Required Behavior		
I visit my building(s) maintenance staff member(s) office/workshop at least twice a month.	☐ Y	☐ N	☐ Y	☐ N	☐ DK	☐ Y	☐ N	☐ DK
I introduced myself to my building(s) maintenance staff member(s) when I began my current position.	☐ Y	☐ N	☐ Y	☐ N	☐ DK	☐ Y	☐ N	☐ DK
I requested a building tour when I began my position with my building(s) maintenance staff member(s).	☐ Y	☐ N	☐ Y	☐ N	☐ DK	☐ Y	☐ N	☐ DK
I utilize my building(s) maintenance staff member(s) to assist in the training of my staff.	☐ Y	☐ N	☐ Y	☐ N	☐ DK	☐ Y	☐ N	☐ DK
I have contact with maintenance staff members regarding my building(s) at least twice a month.	☐ Y	☐ N	☐ Y	☐ N	☐ DK	☐ Y	☐ N	☐ DK
I plan events that recognize my building(s) maintenance staff member(s).	☐ Y	☐ N	☐ Y	☐ N	☐ DK	☐ Y	☐ N	☐ DK
I have interactions outside of the work setting with my building(s) maintenance staff member(s).	☐ Y	☐ N	☐ Y	☐ N	☐ DK	☐ Y	☐ N	☐ DK
I know the first and last name of my building(s) maintenance staff member(s).	☐ Y	☐ N	☐ Y	☐ N	☐ DK	☐ Y	☐ N	☐ DK
I know something about my building(s) maintenance staff member(s) unrelated to the work setting.	☐ Y	☐ N	☐ Y	☐ N	☐ DK	☐ Y	☐ N	☐ DK
I participate in regularly scheduled meetings with my building(s) maintenance staff member(s).	☐ Y	☐ N	☐ Y	☐ N	☐ DK	☐ Y	☐ N	☐ DK
AWARENESS	Independent Behavior		Expected Behavior			Required Behavior		
I conduct a walk-through with my building(s) maintenance staff member(s) at least twice a month.	☐ Y	☐ N	☐ Y	☐ N	☐ DK	☐ Y	☐ N	☐ DK
I submit maintenance requests.	☐ Y	☐ N	☐ Y	☐ N	☐ DK	☐ Y	☐ N	☐ DK
I am aware of current maintenance concerns in my building(s).	☐ Y	☐ N	☐ Y	☐ N	☐ DK	☐ Y	☐ N	☐ DK
I set maintenance related standards of quality in my building(s) equal to or above minimum departmental standards.	☐ Y	☐ N	☐ Y	☐ N	☐ DK	☐ Y	☐ N	☐ DK
I receive and review budget information regarding facilities on a regular basis.	☐ Y	☐ N	☐ Y	☐ N	☐ DK	☐ Y	☐ N	☐ DK
I make adjustments to spending in areas I control after reviewing maintenance budget information	☐ Y	☐ N	☐ Y	☐ N	☐ DK	☐ Y	☐ N	☐ DK
I am aware of costs of current and pending maintenance/renovation/new construction projects in my building(s).	☐ Y	☐ N	☐ Y	☐ N	☐ DK	☐ Y	☐ N	☐ DK
I inspect vacant rooms in the building(s) I am responsible for to find maintenance issues to be resolved.	☐ Y	☐ N	☐ Y	☐ N	☐ DK	☐ Y	☐ N	☐ DK
I am aware of future renovation, maintenance or new construction projects for building(s) I am/will be responsible for.	☐ Y	☐ N	☐ Y	☐ N	☐ DK	☐ Y	☐ N	☐ DK

APPENDIX A2

INVOLVEMENT	Independent Behavior		Expected Behavior			Required Behavior		
I make suggestions regarding maintenance operations for the building(s) I am responsible for.	☐ Y	☐ N	☐ Y	☐ N	☐ DK	☐ Y	☐ N	☐ DK
I make decisions regarding maintenance operations for the building(s) I am responsible for.	☐ Y	☐ N	☐ Y	☐ N	☐ DK	☐ Y	☐ N	☐ DK
I coordinate the maintenance operations for the building(s) I am responsible for.	☐ Y	☐ N	☐ Y	☐ N	☐ DK	☐ Y	☐ N	☐ DK
I am part of teams that oversee renovation projects that would be considered capital improvements.	☐ Y	☐ N	☐ Y	☐ N	☐ DK	☐ Y	☐ N	☐ DK
I create long-term maintenance plans for my building(s).	☐ Y	☐ N	☐ Y	☐ N	☐ DK	☐ Y	☐ N	☐ DK
I close rooms/wings/floors for maintenance related issues.	☐ Y	☐ N	☐ Y	☐ N	☐ DK	☐ Y	☐ N	☐ DK
I make suggestions regarding the maintenance/facilities budget for my building(s).	☐ Y	☐ N	☐ Y	☐ N	☐ DK	☐ Y	☐ N	☐ DK
I make suggestions regarding new construction projects that I will be responsible for.	☐ Y	☐ N	☐ Y	☐ N	☐ DK	☐ Y	☐ N	☐ DK
I am part of teams that oversee new construction projects that I will be responsible for.	☐ Y	☐ N	☐ Y	☐ N	☐ DK	☐ Y	☐ N	☐ DK
I maintain involvement in maintenance/facilities related crisis situations until a resolution is found.	☐ Y	☐ N	☐ Y	☐ N	☐ DK	☐ Y	☐ N	☐ DK
I make "punch list" inspections after renovation/new construction projects are complete.	☐ Y	☐ N	☐ Y	☐ N	☐ DK	☐ Y	☐ N	☐ DK

Departmental Emphasis

Student Services Model: The purpose of student affairs work is to provide support for the academic mission of the academy by providing numerous adjunctive services, such as: admissions; counseling; student activities; financial aid; etc.	**Current Departmental Emphasis** (SELECT ONE THAT MOST CLOSELY APPLIES TO YOUR DEPT.) ☐ Student Development ☐ Student Learning ☐ Student Services
Student Learning Model: The purpose of student affairs work is an emphasis on shared efforts with other educators to achieve a more integrated or 'seamless' learning environment. Outcomes of this model are primarily related to intentional learning, academic assistance and an enhanced academic climate.	
Student Development Model: The purpose of student affairs work is a focus on the human maturation process from birth to death. Professionals focus on developmental tasks that students experience. The theoretical perspectives (physical, person-environment, cognitive, typological, etc.) form the criteria for decision making concerning programming on campus.	

Position Status

Entry-Level: Any professional staff member who is holding a position considered to be the first full-time position and does not require previous full-time professional experience.	**Position Status** (SELECT ONE) ☐ Entry-Level ☐ Middle Manager
Middle Manager: Any professional staff member who holds a position considered a step above an entry-level position on the organizational chart. For the purpose of this study, middle managers supervise entry-level or graduate-level staff in the area of residence life.	

Maintenance Services

Outsourced: The individuals who enter the residence halls to conduct maintenance and facilities related repairs do not directly report to the housing department. These individuals may be part of the university's maintenance/physical plant.	**Maintenance Services** (SELECT ONE) ☐ Outsourced ☐ In House ☐ Both ☐ Unsure
In House: The individuals who enter the residence halls to conduct maintenance and facilities related repairs report directly to the housing department.	
Both: Your housing department utilizes a combination of the two models outlined above.	

Full Time Residence Life Experience (YEARS)
☐ 0 to 3 ☐ 3 to 5 ☐ 5 to 7 ☐ 7 to 9 ☐ 10 +

Sex
☐M ☐F

Career Aspirations (YOUR ULTIMATE CAREER GOAL – CHECK ONE)
☐ Director (ANY AREA) ☐ Dean of Students ☐ Outside of Higher Education ☐ Vice President Level (ANY AREA) ☐ President ☐ Uncertain

Is Chief Housing Officer a potential career option?
☐ Yes ☐ No

Highest Degree Attained
☐ Professional Degree
☐ Associate's Degree
☐ Bachelor's Degree
☐ Master's Degree
☐ Doctorate Degree
☐ Other

SCHOOL CODE

APPENDIX B

Dear Chief Housing Officer:

My name is Michael Pennington and I would like to invite your residence life staff members to participate in an Association of College and University Housing Officers – International (ACUHO-I) supported research study regarding the facilities-related behaviors of residence life professionals. The purpose of this study is to examine the behaviors of residence life professionals in relation to their facilities and facilities staff.

The focus of this study is entry-level and middle manager professionals in residence life. They are defined as follows:

Entry-Level: Any professional staff member who holds a position considered to be the first full-time residence life position in the organization. No previous full-time professional experience is required in order to be employed in the entry-level position.

Middle Manager: Any professional staff member who holds a position considered a step above an entry-level position on the department's organizational chart. For the purpose of this study, middle managers may supervise entry-level professionals or graduate-level staff members.

PROCEDURES TO PARTICIPATE
If you feel this is a study you would like for your residence life professionals to participate in, please follow these simple procedures:

1. Respond via electronic mail to me at MIKEBP@UGA.EDU by March 31, 2006.

2. Provide me with the electronic mail addresses of your residence life professionals fitting the above definitions – your responsibilities are complete after this step. (You may include the staff members' contact information in the body of your reply message or as a separate attachment to that email.)

3. Those professionals will then receive a subsequent electronic message inviting their participation in the study.

I would like to thank you in advance for your support of this research. I hope this research will contribute to the field of college and university housing. I will make the overall research results available to ACUHO-I.

Appendix C

Dear Residence Life Professional:

My name is Michael Pennington and I would like to invite you to participate in a research study being supported by the Association of College and University Housing Officers - International.

Your email address was provided by your institution's Chief Housing Officer as a residence life professional fitting one of the following descriptions:

Entry-Level: Any professional staff member who holds a position considered to be the first full-time residence life position in the organization. No previous full-time professional experience is required in order to be employed in the entry-level position.

Middle Manager: Any professional staff member who holds a position considered a step above an entry-level position on the department's organizational chart. For the purpose of this study, middle managers may supervise entry-level professionals or graduate-level staff members.

The purpose of this study is to examine the behaviors of residence life professionals in relation to their facilities and facilities staff.

The survey should take no more than 15 minutes to complete. You may find the survey by following the link below:

http://vpsa5.vpsa.uga.edu/surveys/residencelife/residencelife.htm

I plan on beginning data analysis on April 21, 2006 so completion of the survey would be incredibly helpful.

CONSENT INFORMATION
By completing the survey, you are agreeing to participate in the research. Please note that there is a limit to the confidentiality that can be guaranteed due to the technology itself. While I can ensure confidentiality of a participant by utilizing standard procedures when the final report is written, I cannot ensure confidentiality during the actual Internet communication procedure.

If you have questions regarding this research, please feel free to me at MIKEBP@UGA.EDU or (706) 542-3753. You may also contact the Chairperson of the Institutional Review Board at the University of Georgia at IRB@UGA.EDU or (706) 542-3199 for further questions regarding the research.

Thank you in advance for your support.

Appendix D

Dear Residence Life Professional:

This is a follow up email to one you received from me recently. I wanted to remind you of the opportunity to participate in a research study being supported by the Association of College and University Housing Officers - International. If you have already completed this survey, please delete this message with my thanks for your participation.

If you have not completed the survey, please read on for more information.

My name is Michael Pennington and I would like to invite you to participate in a research study being supported by the Association of College and University Housing Officers - International.

Your email address was provided by your institution's Chief Housing Officer as a residence life professional fitting one of the following descriptions:

Entry-Level: Any professional staff member who holds a position considered to be the first full-time residence life position in the organization. No previous full-time professional experience is required in order to be employed in the entry-level position.

Middle Manager: Any professional staff member who holds a position considered a step above an entry-level position on the department's organizational chart. For the purpose of this study, middle managers may supervise entry-level professionals or graduate-level staff members.

The purpose of this study is to examine the behaviors of residence life professionals in relation to their facilities and facilities staff.

The survey should take no more than 15 minutes to complete. You may find the survey by following the link below:

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Thank you in advance for your support.