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Positive Behavior Supports: An Alternative to the Overuse of Psychotropic Drugs

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Positive Behavior Supports: An Alternative to the Overuse of Psychotropic Drugs

By

Rachel Woollard

An undergraduate honors thesis submitted in partial fulfillment of the

requirements for the degree of

Bachelor of Science

in

University Honors

and

Psychology

Thesis Adviser

Thomas Kindermann

Portland State University

2014

Positive Behavior Supports-an Alternative to Overuse of Psychotropic Drugs

Abstract

The potential benefits of positive behavior supports were explored in a sample of elderly persons and traumatic brain injured persons, all of whom were exhibiting behavioral problems. The sample was drawn from Woollard Ipsen Management, LLC's clientele base and included persons living in adult foster care homes and assisted living facilities within the State of Oregon. All sample members exhibited behavioral symptoms (n=100) that threatened to result in eviction from their places of residence and most were taking at least one psychotropic medication (n=75). Behavior consultants (n=5) working with the residents were also interviewed and observed. Data was collected on residents using the resident behavior charts, intake forms, working behavior plans, and surveys provided by Woollard Ipsen Management and on the behavior consultants using interview questions and observation. Data was analyzed to determine diagnosis, behavioral patterns, and suggested intervention techniques and then compounded for possible patterns and support for or against the hypotheses (i.e. most common diagnosis will be dementia, TBI will be linked to physical aggression, etc...). The most common diagnosis was depression, followed by dementia. The most common behavioral symptom was verbal aggression and the most common suggested intervention by behavior consultants was to avoid arguing with resident. Results indicated a statistically significant relationship between several diagnoses and behavioral patterns or resultant suggested intervention techniques and indicated an overall support for positive behavioral supports for the specified populations. Implications of these findings for psychotropic drug use within these populations are discussed.

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Finally, thank you to Woollard Ipsen Management, LLC, for providing me with all the materials I needed to conduct my study and being so positive and accommodating throughout the process. To the Woollard Ipsen Behavior Consultant's, thank you for your feedback and for allowing me to shadow you for so many hours, I could not have done it without you. To Jana Hirsch and Marla Ipsen, thank you for putting everything into motion and providing me with the endless materials I requested. I hope this thesis benefits the BSS program so it can continue to expand and help the community.

Background

Health care, like anything else, is constantly changing as innovations and preventative techniques continue to develop. It is against the natural progression of the sciences to ignore available advancements. To continue in old molds when new more efficient ones are available is a mistake for reasons of both financial efficiency and the quality of life for those being cared for. Health care demands constant attention and innovation not only because it impacts the well being of large numbers of the population but also because of the huge amount of funds it requires. Therefore, when new modes of preventative health care emerge, particularly when they are not associated with elevated medical risks but are rather the result of honing in on improved educational techniques for the caregivers and specific psychological interventions for the patients, it is necessary to test their potential.

According to an article published by PBS the United States spends on average of \$8,233 per person on health care costs every year (Kane, 2012). To put this figure into perspective, this “is more than two-and-a-half times more than most developed nations in the world, including relatively rich European countries like France, Sweden and the United Kingdom, [furthermore, the] U.S. health care costs now eat up 17.6 percent of GDP” (Kane, 2012, para. 3). These costs are spread throughout the population, however, according to a healthcare finance review a large portion of the expense is due to the rapidly growing geriatric population. Of the total health care expense in the nation, 36% went to persons aged 65 or older in 2002 despite this group composing a mere 13% of the population (Agency for Healthcare Research and Quality, 2006)¹. Older patients now incur higher care costs in their last ten years of life than in their entire life

¹ See end of document, before Appendix A, for reference list

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with nearly half of all health care expenditures occurring after the age of 65 (Alemayehu & Warner, 2004).

As the elderly population continues to grow around the world and within the United States in particular, the study of care options for older adults becomes increasingly relevant (Schneider, 1992). According to a fiscal study on global aging the increase of the elderly population was projected (in 1987) to inflate health care costs within the United States six times by 2040, resulting in a cost of approximately \$139 billion for nursing home care alone (Schneider, 1992). A huge portion of this cost is due to Medicaid, which offers health care options to low income individuals. According to the DHS 2011 Actuarial Report, in 2010 \$113 billion was spent on Medicaid coverage for long-term care individuals (Truffer, Klemm, Wolfe, & Rennie, 2012). Low-income geriatric communities present a unique set of challenges, particularly as this population is at higher risk for “low health literacy” and “chronic health conditions” (Counsell, Callahan, Buttar, Clark, & Frank, 2006). Thus, preventative care and intervention techniques need to be explored in order to find means to decrease cost as well as ensure the population is getting the highest quality of care possible.

Apparently, much of the health care increases are due to the process of biological, cognitive, and behavioral decline that occur at higher ages. However, cognitive and behavioral decline in the elderly is not a homogenous process and much of the population will not face exponential decline (Hayden et. al, 2011). Nevertheless, a certain number of individuals in the population will experience rapid decline as a result of various diagnoses, for example, dementia, or in some cases, traumatic brain injuries. According to a study on the cognitive decline of the elderly “the average trajectory of cognitive ability over the last three to four decades of life is one of accelerating decline” (Hayden et. al, 2011). With increasing age, it becomes more likely

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that individuals experience losses in their physical/biological, cognitive, and social functioning (e.g., P. Baltes, 1989) that limit their ability to function independently and to live by themselves. Those individuals who do experience rapid decline, as well as those who simply reach an age where exponential decline is unavoidable, are in need of a specific kind of care catered to their level of ability in daily functioning. Such care is offered in a number of settings, one of the most prevalent being community based care settings, which include assisted living facilities, memory care facilities, and adult foster care homes. While these long term care options offer useful services to older adults, improvements are necessary to ensure these living placements meet the demands of the individual through person centered care while still maintaining viable levels of expense.

Interestingly, much of the cost for the elderly, as well as for members of the traumatic brain injury communities (which are often cared for alongside older adults), are associated with medication costs and the price of failed living placements due to behavioral problems. Unfortunately, the nature of decline results in a number of behavioral issues in some individuals, making caring for them more difficult. Furthermore, these behavioral issues are most often treated with psychotropic medications- a huge cost to the health care system. This would not be a bad allotment of funds if it were actually successful; however there have been an increasing number of studies that have found chemical restraints as having limited success in mitigating problem behaviors and some studies have even found that these medications often result in an accelerated progression of behavioral and cognitive decline. One study, for example, conducted on the treatment of behavioral problems for elderly individuals with dementia using antipsychotic medications found that the efficacy of these medications is not zero, but it is limited. The study revealed that the use of antipsychotic drugs resulted in a worsening of

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behavioral symptoms in half of the patients and only resulted in improvements in approximately one fifth (Kleijer et al, 2009). Thus medications often fail to control the behaviors as desired and it is not untypical that elderly are evicted from residences if medication fails. Yet the use of antipsychotics to treat behavioral symptoms of dementia (let alone behavioral symptoms of other diagnoses) remains at 27% in the United States despite findings by the FDA that such use results in 1.6-1.7 fold increase in mortality (Kleijer et al, 2009).

Due to the limited success of psychotropic medication use to control behavioral problems in elderly and traumatic brain injured populations, the question arises as to why the United States continues to be so heavy handed with the use of these potent drugs. According to a study conducted on the costs and benefits of psychotropic medications for older adults, 28% of residents in various care settings are on antipsychotics, 12% are on antidepressants, and 33% are on anxiolytics and hypnotics (Brooks & Hobylyn, 2007). The same study went through many individual medications in a cost benefit analysis and found that many of these drugs further impaired cognitive functioning and resulted in accelerated decline. Thus the authors concluded that psychotropic medications should be prescribed with extreme caution (Brooks & Hobylyn, 2007). Therefore, the continued high percentage rates of psychotropic drug use within the United States is somewhat disconcerting and the situation certainly calls for an exploration into alternative means for mitigating the problem behaviors of the elderly and TBI populations.

Luckily, health care continues to advance and new models of care are beginning to emerge. Findings have indicated that an interdisciplinary approach involving *investigation* into behavioral problems is ideal, which is quite distinct from the common tendency just to use medications to suppress behaviors (Koopmans, Zuidema, Leontjevas, & Gerritsen, 2010). Studies have shown significant promise in the implementation of supportive services to reduce

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health care costs for the elderly and have further found that the “Medicare program will play a critical role in facilitating or discouraging the dissemination of successful new models of care for older adults” (Boult et al., 2009) Furthermore, investigation into our current care systems for the elderly and traumatic brain injured communities is not only relevant in a fiscal sense, but is also promising with regard to the individuals being cared for: There is a high cost for quality of living when people reside in inappropriate or poorly managed settings and are over-medicated in order to fit into these settings. One such supportive service that has been gaining attention over the last decade is that of *positive behavioral support* and it is now becoming clear that this form of supportive service has substantial potential within the geriatric and TBI care communities.

Introduction

Positive behavior supports are a relatively new model of care that first emerged for use in schools and for individuals with disabilities. The notions governing positive behavior supports, however, are not new, as they stem from an extensive past of experimentation and research on the multiple variables impacting human behavior (Horner, 2000). Horner summarizes positive behavior supports as, “the application of behavioral analysis to the social problems created by such behaviors as self-injury, aggression, [etc...and] is an approach that blends values about the rights of people [...] with a practical science about how learning and behavior change occur” (Horner, 2000). In other words, positive behavior supports combine person centered care with considerations of how the environment, the caregiver, and other influences generate or reduce problem behaviors.

Due to the relative newness of positive behavior supports the model has rarely been introduced in community based care settings for older adults within the United States. However, a company named W.I.M. (Woollard Ipsen Management, LLC) based out of Southern Oregon

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has recently developed a program they label “Behavior Support Services” or BSS, which specializes in the application of positive behavior supports within adult care communities for lower income, Medicaid covered adults. The program was developed in response to the high cost associated with failed placement of Medicaid covered individuals due to behavioral problems that were not being effectively controlled by medication. The statewide rollout of the program began in 2012, at which time W.I.M held contracts in only two counties, the program has shown so much success, however that they now serve over twenty counties throughout Oregon. Furthermore, according to DHS and W.I.M’s CEO, the program has shown 87% success so far in alleviating specific behaviors threatening the placement of residents, as determined by successful maintenance of placement.

The Behavioral Support Program offers a unique service as, rather than using traditional behavior modification techniques, it utilizes positive behavior supports. More specifically, the Behavioral Support staff (called Behavior Consultants, who are licensed in the field) go into community care settings and work with providers and care takers regarding specific residents. These residents have behavioral problems that jeopardize their future in their current places of care and could potentially result in placement in high acuity facilities, such as institutionalization. The Behavior Consultants intervene and aid the staff in making alterations in their own behaviors and within the environment to stop or reduce the problem behaviors so that the resident may retain placement. These interventions not only aid the caregivers and the residents by improving the quality of the relationship between resident and caregiver, they also save the system inordinate amounts of money through maintaining placement.

W.I.M’s BSS program is one of the first of its kind and although it is showing great promise it has not been analyzed in any manor other than from a financial standpoint from the

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perspective of the state. The efficacy of positive behavior supports in reducing health care costs to the state can already be seen, however, the specific reasons for why and how the program functions have not been thoroughly analyzed. Therefore, it was my goal to assess the functionality of the program as it relates to elderly and TBI individuals. I attempt to distinguish, through direct analysis of W.I.M's clientele, interviews with staff, and observation, the underlying mechanisms that allow such a program to function and asked questions such as; What behaviors are being mitigated and how? Are certain diagnoses more likely to receive certain interventions? And who is being effected most by this form of intervention?

My research had four specific goals. Firstly, to observe and analyze the usefulness of positive behavior supports in specific case samples (aka adult assisted living and foster home communities) for the purpose of mitigating behavior symptoms threatening placement. Secondly, to combine my observations and data in order to devise a means for systematically tracking which behavioral supports are most efficacious, if any, and which are less. Thirdly, to combine my personal observations with observations made by the consultants to see if they have found certain behavioral suggestions the most successful. And finally, to compare my observations and interpretations with the relevant literature related to the caretaking process, the overuse of medications, and research findings with regard to the applications of positive behavior supports. Overall, I hoped to evaluate W.I.M's Behavioral Support Services program in order to provide insight into which specific components make it successful and in which areas it could be improved. This kind of program has national potential and has already been implemented in some schools and facilities in several states. W.I.M's program is spreading throughout Oregon quickly. An analysis of the program will ideally shed more light on the potential of positive behavioral supports on a whole and aid the further development of W.I..M's Support Services.

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Furthermore, I hoped to show that a program such as this has the potential to offer one means for beginning the slow process of moving away from chemical restraints (overuse of psychotropic drugs to control behaviors) in the geriatric/community based care populations while further reducing the financial burden associated with behavioral problems and subsequent failed placements.

More specifically, the population WIM works with is distinct from other aged populations as decline is usually more rapid and generally associated with a specific diagnosis or is the result of a traumatic brain injury. I hypothesized that if patterns did exist in the elderly and TBI populations being surveyed, then perhaps a pattern of behavioral interventions would also exist and realizing this pattern has the potential to benefit the field. Specifically, I hypothesized that of the population with the most (25% or more) persons exhibiting problem behaviors would have a diagnosis of dementia, as dementia is most often linked to behavioral changes that are then medicated. Furthermore, of the entire sample, unrelated to diagnosis, I hypothesized that the most prevalent intervention technique (suggested in 25% of cases or more) would be redirection, followed by (15% or more) avoiding confrontation/arguing. I also hypothesized that those with TBI diagnosis would have higher rates of physical aggression than other diagnoses. The main goal of this research was to produce a general picture of what the population being serviced by positive behavior supports looks like and to acknowledge any relevant patterns. Decline is not a homogenous process and can therefore present itself in a number of ways with a variety of behavioral symptoms. Therefore, I wished to determine if the elderly and TBI populations being serviced by WIM revealed any patterns of decline and subsequent behavioral issues and produce an analysis of intervention.

Methods

This study utilized data from a number of sources, both observational and written. Written materials (intake forms and behavior plans in particular) provided the information for the majority of the data.

Materials

One hundred completed behavior charts of the individual residents in the care facilities were reviewed. All materials, apart from interview questions and observational criteria used in this study were provided to me by Woollard Ipsen Management. The letter detailing the duties for my internship can be found in Appendix A.

Materials provided by Woollard Ipsen Management included:

(1) The **intake forms** created by Behavior Consultants (see Appendix B for blank example) after preliminary interview with providers and residents (each intake form is in regard to one particular resident who is exhibiting problem behaviors). I reviewed one-hundred of these forms, randomly chosen by Woollard Ipsen Management and provided to me for the purpose of the study. From the forms, I collected the following data:

- The resident's diagnosis
- Any medications being taken at the time of the intake
- Explanations/observations of problems behaviors as described by providers
- Any observations made by the Consultant
- Any additional data relevant to the behavioral symptoms

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(2) A **working behavior plan** generated by the Consultant. This form offers suggestions for preventing/mitigating problem behaviors. From these documents I recorded suggested interventions for each member of the sample. These forms were attached to the intake forms, and therefore I reviewed one-hundred behavior plans after first reviewing the intake form of the corresponding sample participant. A blank example of a behavior plan is attached in Appendix C.

(3) **Surveys** generated by Woollard Ipsen Management to be filled out by providers and given back to Woollard Ipsen after termination of support services (See Appendix D). This, along with information regarding retained placement, is one of the means for analyzing the overall success of Behavioral Support Services. However, these forms are based on the opinions of the providers. I looked at them in order to glean the overall reaction to the program by the providers in an attempt to see if the program was being received with gratitude, frustration, etc...

(4) **Results of interview questions** devised by me and issued to consenting Behavior Consultants (See Appendix E).

(5) Additional materials collected include the observational system that was used (see Appendix F).

Setting

The majority of the time I was stationed in the head office of Woollard Ipsen Managements LLC, which is located in Medford, OR. As can be seen from the letter in Appendix A, I collected data for my job, and only a subset of this data was used for the current study (i.e., only this subset will need Human Subjects clearance). I reviewed one-hundred resident files,

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provided to my at random with all identifiers removed by Woollard Ipsen Management, and recorded age, diagnosis, problem behaviors as observed by providers and caregivers, medications, and suggested interventions.

When I was not working with written materials I was shadowing Behavior Consultants at a variety of locations. These locations were; Adult Foster Care Hoes and Assisted Living or Memory Care facilities working with the state of Oregon, which contract with Woollard Ipsen Management LLC for Behavior Support Services regarding specific residents. All residents resided in adult foster care homes, assisted living communities, or memory care facilities.

The majority of residents (95%) received Medicare/Medicaid benefits. All residents lived within one of the twenty listed counties contracted with Woollard Ipsen Management through the State of Oregon (see Appendix G list 1 for a complete list of counties). Woollard Ipsen Management sees residents throughout these twenty counties. All specific cases occurred when the provider or case manager for the resident exhibiting the behavioral symptoms contacted Woollard Ipsen, at which point a Consultant visited the resident's place of living in order to begin the process of implementing positive supports.

Participants

The following groups of people were included in the study in the capacity outlined below:

Staff

Woollard Ipsen Management currently employs five lead Behavior Consultants who are spread throughout the twenty counties. I shadowed these five consultants a minimum of four separate times each for approximately 6 hours per time. We went to various locations throughout the twenty counties, based on their clientele at the time of shadowing.

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I chose these specific consultants because they have been instrumental in initiating the positive supports pilot program and have spent the most time in the field. Also the head of the Behavior Support Services team recommended that I follow these specific staff members and all staffs consented to let me shadow them. I asked for written consent (see example in Appendix H) upon approval of the proposal. The majority of my observations made while shadowing staff were based on their specific approaches to handling providers and residents. Staff identities will remain confidential and any mention of staff in writing uses a number assigned to each staff member for the purpose of keeping them separate and yet maintaining identity confidentiality.

Providers (caregivers or owners of Foster Care, facility settings)

Woollard Ipsen's Behavior Consultants work directly with the providers in order to implement positive behavior supports through alterations to staff routine, techniques when directly caring for/interacting with resident, and/or alterations to the resident's environment.

I was present during meetings between the coaches and providers and was able to observe these exchanges and ask questions when relevant. Furthermore, Behavior Consultants often do staff training sessions at the facilities and I was able to observe this as well. As I observed five Behavior Consultants approximately four times each I was privy to approximately twenty consultant/provider exchanges.

The goal of my observations was to observe how the consultants approached interactions with providers. (See Appendix F for specific observational goals). The identities of the specific providers have been kept anonymous.

Residents

Residents with problem behaviors living in the facilities or foster care homes. Behavior Consultants work together with the residents and providers regarding the resident's specific

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needs in order to find possible causes for the inappropriate behaviors they are exhibiting and to find ways to alleviate the problems. They do not, however, directly modify any of their behaviors and on some occasions residents are not cognitively capable of holding a conversation, at which point coaches have minimal interactions with them.

I observed any consultant-resident exchanges that did occur during my observations, and was able to ask questions to Behavior Consultants when appropriate. However, I did **not have any direct interaction with the residents in any way pertaining to data collection or the study** in order not to disturb the normal functioning of the program and to preserve their privacy. I introduced myself as Woollard Ipsen's intern and chat with them if they indicated interest in speaking with me, however none of these interactions were related to this study in any way. My observations were directed at the Consultants to observe if/how they interacted with the residents and how these interactions impacted the efficacy of the positive behavior program on a whole (See Appendix F for specific observational goals). Thus, I did not record any of the residents' identities or record any information specific to them.

All residents were informed that I was working as an intern for Woollard Ipsen Management LLC and were asked for their verbal confirmation that they were comfortable with my presences. This had to be done verbally, because in my role as an intern at the facilities, I could not obtain any special permission for work that I have to do anyway. On the occasion that a resident was unable to provide verbal consent, his or her legal guardians provided consent. Note that I, nevertheless, did not record any information specific to the resident, but only observed how the Behavior Consultant made contact with them.

Procedure

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All data collected from **written materials** was entered into an Excel sheet. This included the age of the resident, any diagnosis relevant to mental health or daily functioning (i.e. schizophrenia but not asthma), behavioral symptoms threatening placement, number of psychotropic medications and the classification of each medication (hypnotic, SSRI, etc...), and suggested intervention technique (e.g. “avoid-arguing”). The information was then charted and graphed in order to display possible trends visually. Of the diagnoses, I chose to focus most on the most prevalent two (depression and dementia) and on TBI due to the high percentage of TBI individuals cared for in community based care settings, to see if the number of persons with depression, dementia, or TBI matched the overall average for exhibiting certain behaviors or if other behaviors were more prevalent for each specific diagnosis. Of the behaviors I focused on the three most common as well as physical aggression. I focused on the four most common suggested interventions in order to determine if any of the three diagnoses had higher or lower rates of the three most suggested interventions than the sample average.

Observational data I recorded on site while shadowing behavior consultants and then entered my answers into an Excel spread sheet. For the data provided to me by the behavior consultants who returned their survey questions I recorded any marked similarities or differences in responses. From the surveys provided to Woollard Ipsen Management by the providers I attempted to assess overall attitude based on key words or phrases such as “it helped” or “it did not help”, “I saw noticeable changes”, “It did not work at all”, “waste of time”, “frustrating”, “positive experience”, etc... The overall success of the program for maintaining resident placement has been calculated by Woollard Ipsen Management based on the number of residents they see who then remain at their place of residents, so I did not individually analyze overall success based on this criteria.

Human Subjects Protection

The study was approved by the Portland State Human Subjects Research Review board. All participants' names remained confidential and all materials provided by Woollard Ipsen remained anonymous. None of the participant names were used. All staffs agreed to take part in the study per written consent. All providers agreed to observation of staff/provider interactions per verbal confirmation with the understanding that no information specific to the provider or their residents would be disclosed. All residents or resident guardians provided informed consent to Woollard Ipsen Management in order to allow them and their staff to access all relevant documents and to conduct interviews with the resident.

No confidential resident information was released in any form which could lead back to the resident. Furthermore, all documents provided to me by Woollard Ipsen Management remained anonymous via Woollard Ipsens internal coding system (to which I did not have access). No client names were provided on any of the materials therefore insuring that I did not know about whom intake forms, behavior charts, or specific staff observations regarded. No staff, resident, or provider names were recorded anywhere or at any time during the study. All observations and materials were utilized for the purpose of examining the overall efficacy of positive behavioral supports based on the success of its relevant components, no personal or confidential information were released in any way which could lead back to any individual or group thereof.

Results

Resident Data

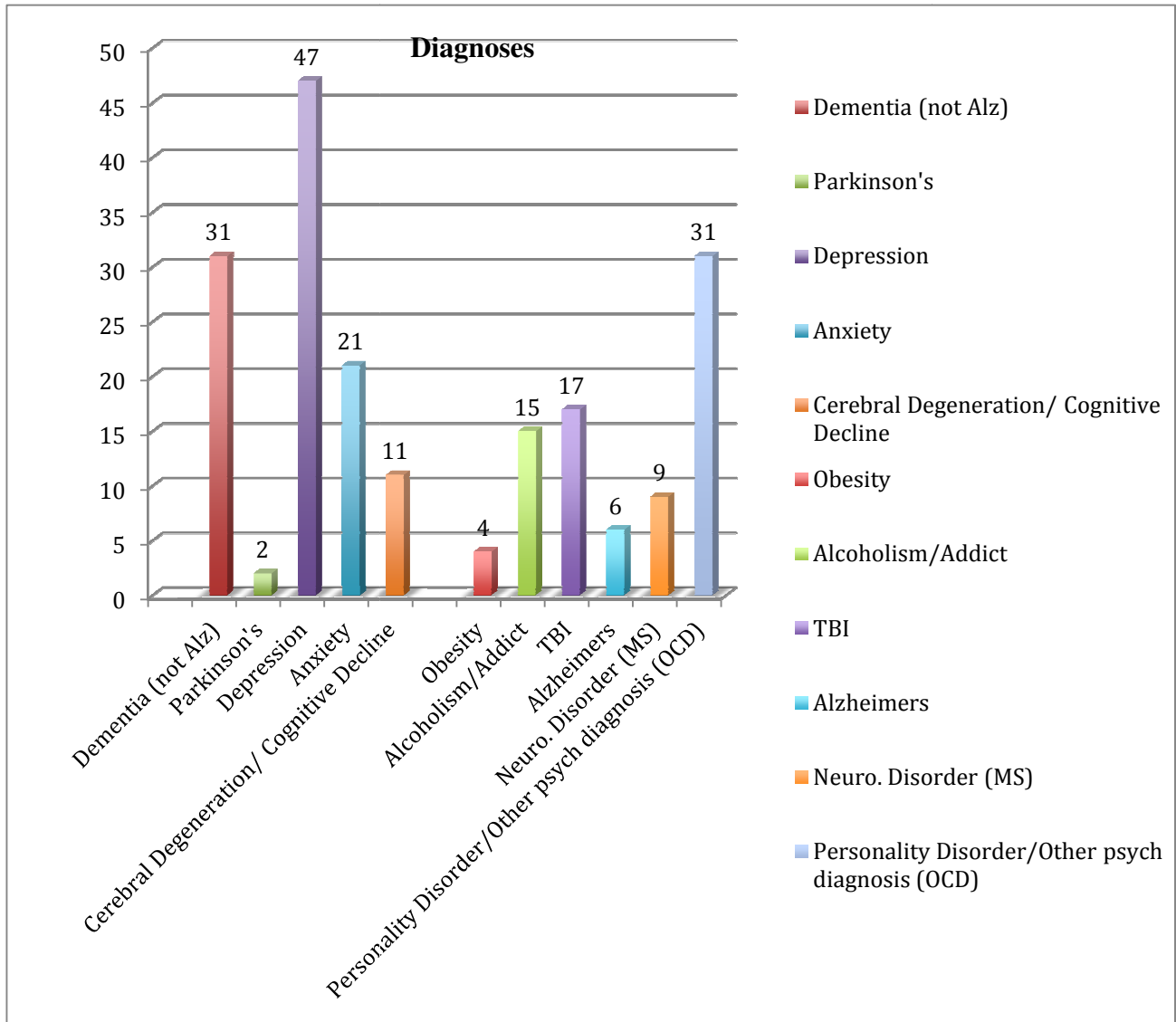
Of the 100 residents (as found based on charts) 75% were on at least one psychotropic medication and 17% were on at least four different psychotropic medications and 54% were on at least two. Of persons with a Dementia diagnosis were on an average of 2.2 psychotropic medications each. 31% of residents were under 65 years of age but had a diagnosis of a traumatic brain injury or other psychological diagnosis leading them to be cared alongside elderly persons. 57% of residents were aged 65-90 and 12% were 90+.

The most common diagnosis was Depression, followed by Dementia. The most common behavioral issue was verbal aggression, followed by attention/seeking or demanding behaviors. The most common suggested intervention by the Behavior Consultant was to avoid arguing, followed by redirecting.

For a systemization of this data, see Figures 1 to 3.

Figure 1

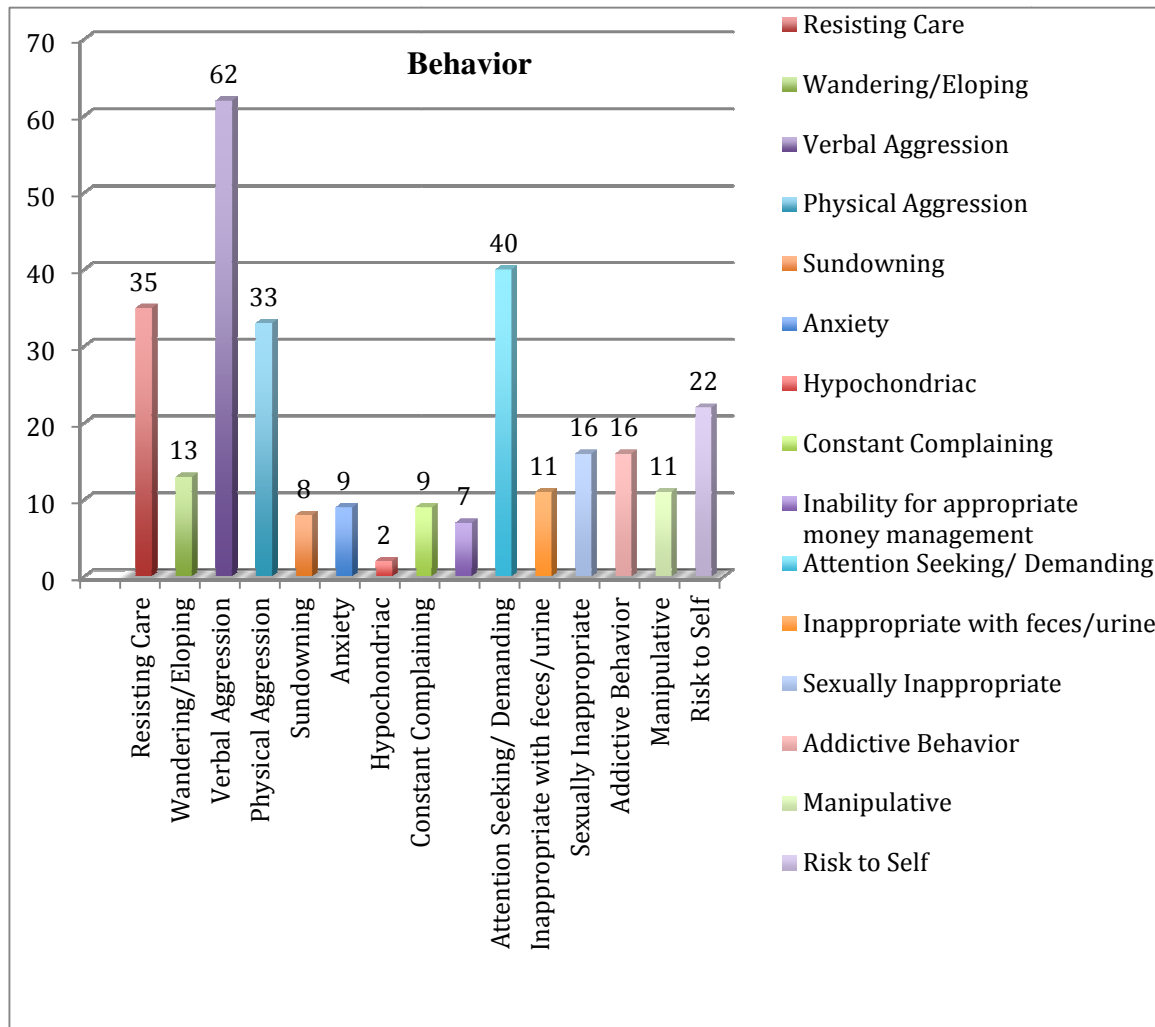
Occurrence of specified diagnoses. N=100.



Depression was the most common diagnosis followed by Dementia (other than Alzheimer’s) and Personality Disorder/other miscellaneous psychological diagnoses. Due to the fact that the Personality Disorder category included a number of miscellaneous diagnoses, I chose to review trends in TBI rather than this category, as modes of caring for the TBI community is of interest and whether or not they respond similarly to the elderly population is a relevant question.

Figure 2

Occurrence of behaviors. N=100

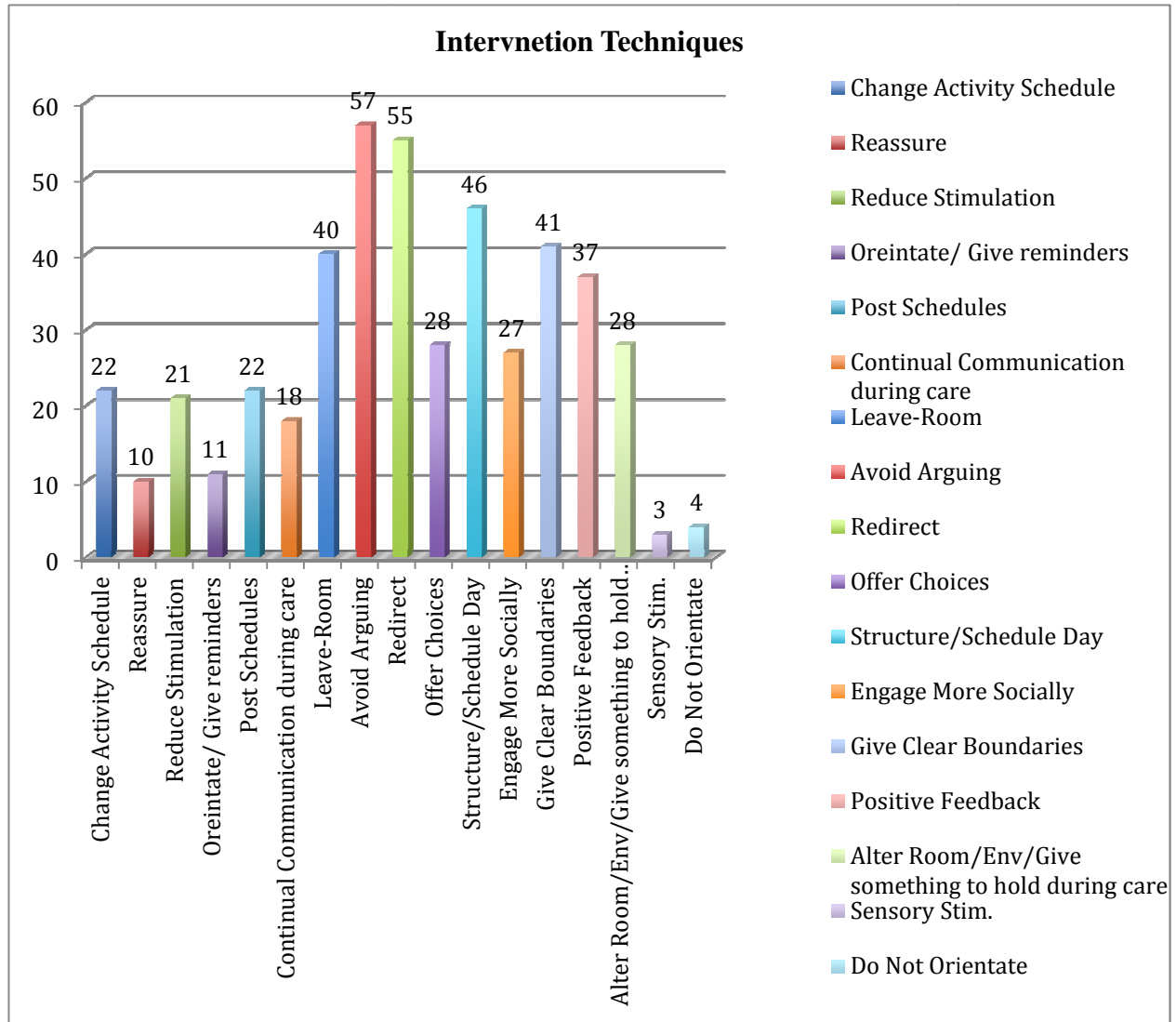


Verbal aggression was the most common behavior, followed by attention seeking/demanding behaviors and then by care resistance. Physical aggression was the fourth most common behavior with a sample average of 33%. I chose to include physical aggression in my analysis of specific diagnoses because it is a strong behavioral symptom that gets a lot of attention from staff and providers and is particularly likely to threaten resident placement.

Figure 3

Occurrence of suggested intervention techniques. N=100

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The most frequently suggested intervention technique was to avoid arguing, followed by redirection and then a change of structure/scheduling within the residents day and giving clear boundaries. Sensory stimulation and avoiding orientation were most often paired with the diagnosis of Alzheimer’s so these recommendations were infrequent to match the diagnosis of Alzheimer’s.

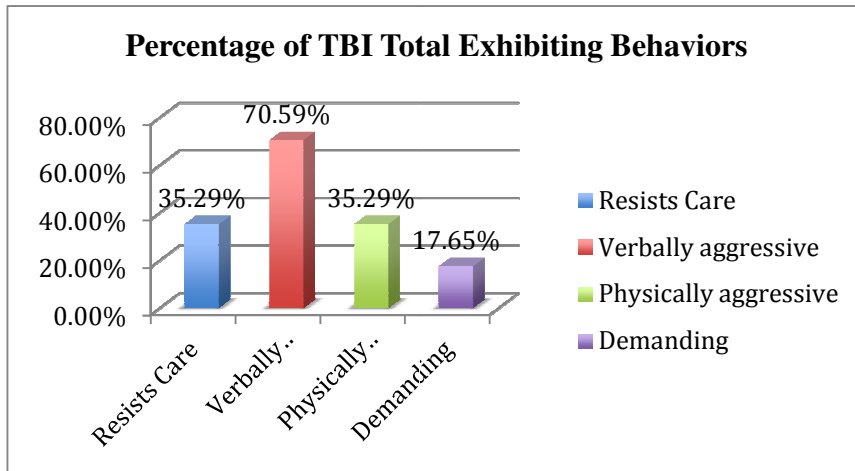
Trends in Resident Data

Figures 4-6 show three of the most prevalent/relevant diagnoses and the percentages of these diagnoses that exhibited the most common behavioral symptoms. Below are summations of the

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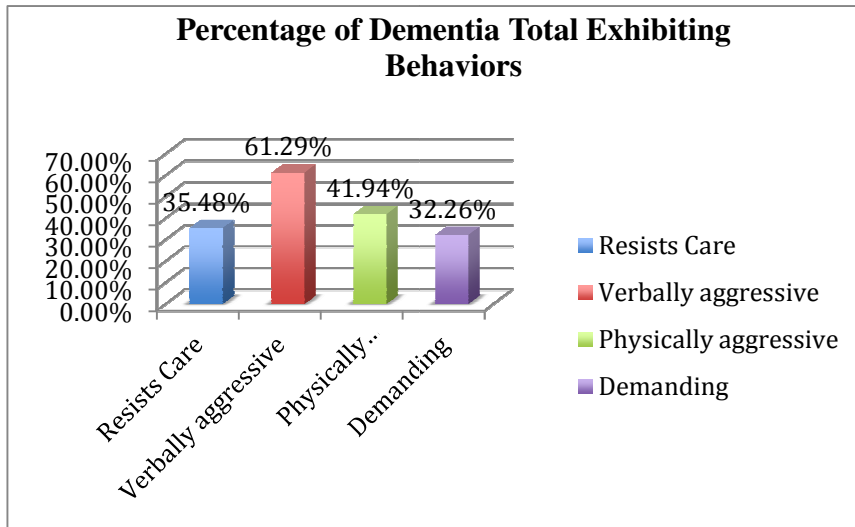
data with chi square analysis where $\alpha=.1$, $n=100$, with Null Hypothesis: The variables are independent from one another and Alternative Hypothesis: The variables are not independent.

Figure 4



Verbal aggression was 8.59% higher for those in the sample with a diagnosis of TBI versus the sample average. However, after chi square analysis with $\alpha=.1$, $p=.42$, this percentage cannot be determined to be statistically significant, the null hypothesis (TBI and rate of aggression are independent) cannot be rejected. Resisting care was within 1% of the sample average and physical aggression was only 2.29% higher. **Attention seeking and demanding behavior was 22.35% lower** than the sample average. Here $p=.039$, therefore it is statistically significant and we can accept the alternative hypothesis that a diagnosis of TBI is related to lower levels of attention seeking/demanding behavior.

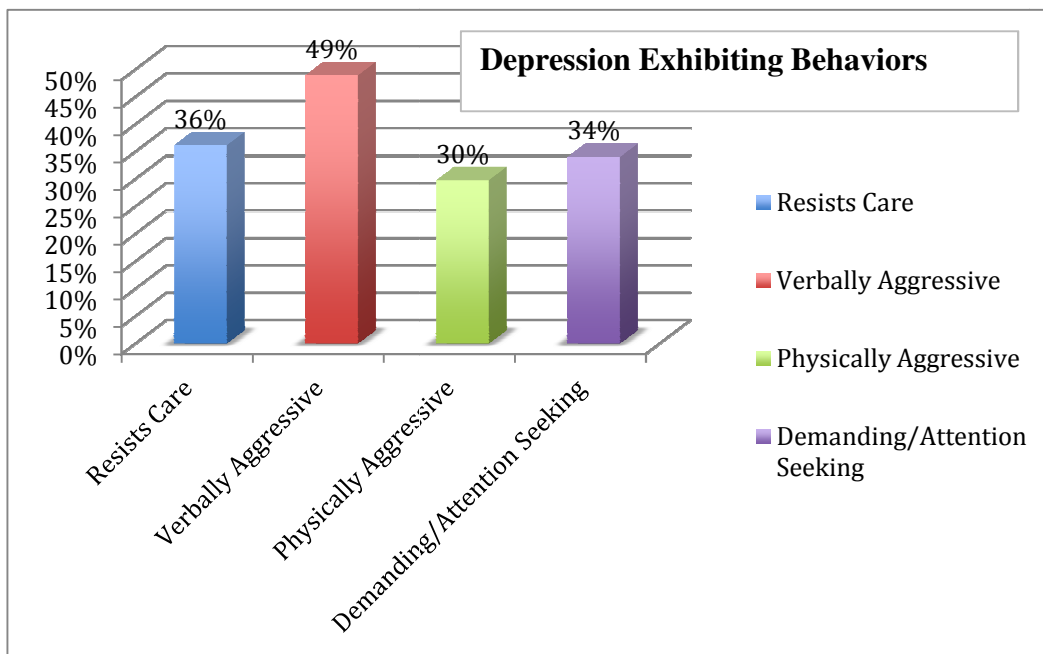
Figure 5



Verbal aggression for persons diagnosed with dementia was within 1% of the sample average.

Physical aggression, however, was 8.94% higher than the sample average. However, $p=.42$, so we cannot prove dependence. Demanding/Attention Seeking behaviors were 7.74% lower and Care Resistance was within 1% of the sample average.

Figure 6



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Rates of **verbal aggression for those with the diagnosis of depression were 13% lower** than the sample average with $p=.01$, so a possible relationship between lowered verbal aggression and depression exists. Care Resistance was within 1% of the average and physical aggression was only 3% lower. Demanding/Attention Seeking Behavior was 6% lower than average.

Of the most common diagnosis/most relevant to this study certain intervention techniques were used most commonly. Below is a table (Table 2) depicting diagnosis and most suggested intervention related to said diagnosis. One can see intervention techniques were fairly stable in for all three diagnoses. However, dementia has a higher number of recommended redirects and TBI has a higher number of recommended boundaries than the other two.

Table 2

	Avoid Arguing	Redirect	Schedule Day/Alter Schedule	Give Boundaries
TBI	53%	47%	41%	65%
Depression	53%	47%	53%	28%
Dementia	55%	68%	55%	29%

For the TBI diagnosis, the suggestion to avoid arguing was 4% lower than with the sample average, redirection was 8% lower, scheduling day/altering schedule was 5% lower, and **giving boundaries was 24% higher ($p=.03$, a possible relationship exists)**. Of those with Depression to avoid arguing was 4% lower than the sample average, redirection was 8% lower, schedule day/alter schedule was 7% higher, and **giving boundaries was 13% lower than average ($p=.01$, a possible relationship exists)**. Of those with Dementia avoiding arguing was 2% lower than average, **redirection was 13% higher ($p=.08$, a possible relationship exists, however, p is**

close to 1 so the relationship is not strong) , scheduling/altering day was 9% higher, and giving boundaries was 12% lower than average (p=.10, a possible relationship cannot be proven).

Behavior Consultant Data

See Appendix E for Interview Questions

Four of the five behavior consultants agreed to answer the survey questions. Based on the survey results the average consultant working for WIM has worked in the BSS program for 1 year or less. $\frac{3}{4}$ of the consultants expressed love for their job and the last consultant expressed liking with occasional frustrations. $\frac{3}{4}$ consultants expressed some frustration with working with providers, one said only 50% actually utilize the advice while another stated only about 80% utilize the advice. All consultants responded that on the occasion that providers will not try suggested behavior interventions they have no choice but to terminate the client although they will try a number of times to communicate the importance of the program before reaching this point. Regarding personal observations Behavior Consultant (BC) 1 said s/he has found that most behaviors stem from life long habits and that the only successful way to alter these habits s/he has found is through environmental alterations and/or caregiver supports rather than directly attempting to change the client. Furthermore, BC1 observed that many providers do not understand the nature of TBI's and further education is necessary. Finally BC1 noted that all interventions should keep in mind the residents need for independence and that her/his number one suggestion is that the caregivers pay individual attention to each resident. BC2 observed that in his/her opinion many of the diagnoses are incorrect or do not properly convey the true nature of the situation or individual BC2 also observed that most behaviors are actually being caused by the caregivers or providers because they expect every resident to take have the same schedule without catering to individual preferences. For example, a resident may be acting verbally

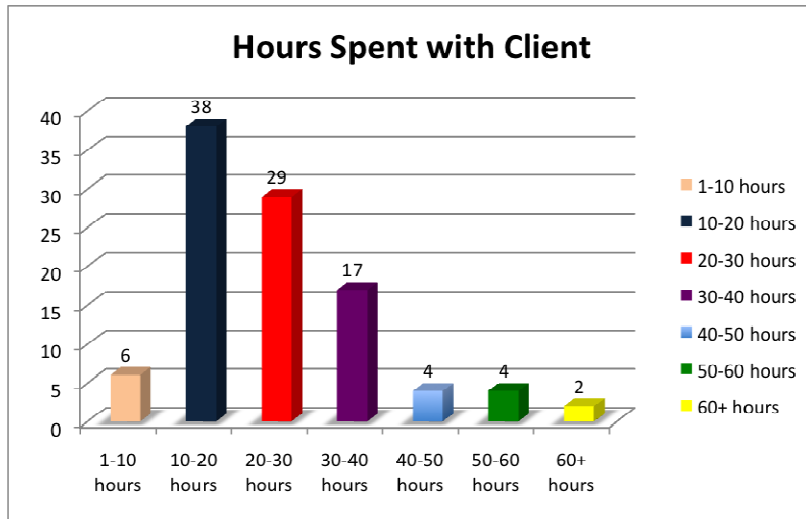
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aggressive in the morning because they don't like to be woken up before 11am. These are the kind of small environmental/care modifications BC2 found to be most helpful in altering behaviors. BC2 also stated that many residents have unmanaged pain and as soon as this is addressed many behaviors subside. BC3 stated in his/her survey response that approach is key and that caregivers/providers need to maintain a certain level of respect so the resident may retain dignity. BC4 noted that s/he most often deals with residents with memory loss caused by either dementia or TBI and that his/her most suggested intervention was allowing the residents to maintain choice as a part of their daily lives. All behavior consultants responded that in their opinions positive behavior supports help the geriatric and TBI populations and that this mode of support should continue to expand in these populations. BC 2 and 3 expressed that in their opinions the geriatric and TBI populations are extremely overmedicated with psychotropic drugs and that BSS is an excellent alternative to overmedication. BC 1 expressed the opinion that many individuals are overmedicated or on the wrong medications and that BSS is a good addition and possible alternative to medications. BC 4 indicated that s/he feels that BSS is a good addition to medication and that medication should be used only when BSS interventions fail to alter behaviors or medication is necessary for mental health reasons.

Figure 7 depicts the average amount of hours the behavior consultants spent per case (n=100).

Figure 7

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Personal Observation Data/ Provider Survey Data

See Appendix F for Observation Criteria/Questions. See Appendix D for Feedback Forms

Table 3: Observational Criteria Answers (Scale 1-5)

See Appendix F for Questions and Answer Scale

BC=Behavior Consultant

Answer Scale From 1 to 5

BC	Question 1	Question 2	Question 3	Question 4	Question 5	Question 6	Question 7	Question 8
1	5	4	5	5	5	5	4	4
2	5	5	5	5	5	5	5	5
3	4	4	4	5	5	4	3	4
4	3	4	3	4	5	5	3	4
5	5	5	5	4	4	5	5	5

All Behavior Consultants (n=5) were kind and personable around both residents and staff, with some differences due mostly to personality. I did not observe any blatant, or even minimal, abuse or mistreatment, either verbal or physical, of either staff or residents. Overall, the Behavior Consultants were efficient and knowledgeable but did not talk above the education level of staff or residents. Providers were observed to be mostly receptive of the intervention techniques

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suggested by the consultant, although some were not actively listening or appeared to be skeptical of the efficacy of such interventions. Most providers said they were willing to at least try said interventions, however and most could at least acknowledge that if the interventions worked it would make it easier on both staff and residents. These attitudes reflected the feedback from the Woollard Ipsen Management Provider Feedback Forms, most of which indicated that the providers did see results even if they were initially skeptical. Not all providers returned the forms so data collection in this area was spotty, however it did reveal that further education of caregivers/providers does help with caregiver/provider attitude towards residents and that by the end of the interventions many providers were pleasantly surprised by the results. Some providers did indicate frustration and felt that more direct intervention techniques or medication were needed and that BSS did not help the situation and eviction still resulted. This information is interesting to note but does not hold any real statistical significance, particularly due to the low feedback form return rate.

Discussion

Of the initial hypotheses, the hypothesis that the most frequent diagnosis would be Dementia was not supported, as the rate of Depression was 16% higher. However, it is possible that depression is a secondary diagnosis or second to poor placement and subsequent unhappiness in placement, poor or improper treatment by caregivers prior to interventions, or to decline in functional ability. A follow up study of interest would be to determine if rates of depression lower after BSS intervention to see if depression is perhaps linked to a lack of cohesion between residents and caregivers that results in an unhappy living and care environment.

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Dementia was determined to be the second most prominent single diagnosis. Personality and other psychological disorders were equally prevalent but as this included a larger, and non-specific group of diagnoses, I did not closely analyze this group. A future study could break these psychological diagnoses into more distinct categories to see if there is any statistically significant link between one specific psychological diagnosis and certain behavioral patterns. Interestingly, rates of physical aggression were higher in those with dementia than those with TBI diagnosis, something not anticipated, and not supportive of the initial hypothesis in which I theorized that those with a TBI diagnoses would have the highest rates of physical aggression. According to the chi square analysis there was no statistically significant relationship between a dementia diagnosis and physical aggression. However, future studies could investigate a possible link between dementia and certain behavioral issues with a larger sample, as the data did indicate the possibility of a linkage between dementia and physical aggression.

The hypothesis that redirection would be the most prevalent suggested intervention technique was also disproven, as avoiding arguing was more common. However, redirection was second most common to avoiding engaging in argument. In my observations I noted that most friction between residents/caregivers seemed to come from non-lucid or overly confrontational residents getting provoking caregivers. Therefore, it was not surprising that to avoid arguing was the number one recommendation and as basic as this seems it is a matter of education for the caregivers to understand that any argument engagement with the residents is a losing battle as they will be fighting with a person in an altered mental state or whose primary desire is attention, whether positive or negative. The underlying motive by residents to get attention was implied by the finding that 40 of the 100 residents exhibited attention seeking/demanding behaviors and other behaviors (e.g. continuous complaining) could possibly be linked to a need for attention.

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Further studies could investigate whether or not a lack of social engagement and subsequent loneliness is linked to behavioral issues, particularly those that are more obviously attention seeking. Interestingly, a diagnosis of traumatic brain injury was linked to *less* attention seeking/demanding behaviors.

The pattern found in the reviewed literature also held true for the studied sample regarding medications. Of the sample 75 out of the 100 participants were on at least one psychotropic medication. Within the entire sample 221 medications were being administered, 50 of which were Benzodiazepines, 38 were Atypical Antipsychotics, 37 were non-SSRI antidepressants, 41 were SSRI's, and 40 were Hypnotics. Persons with dementia were found to be on an average of 2.2 psychotropic medications, many of them antipsychotics. Furthermore, all persons in the study were at risk of eviction, indicating that the prescribed medications were not satisfactorily controlling behaviors.

Of the data found regarding the behavior consultants, it was found that the majority of them view the use of psychotropic medications to be too heavy handed in the aged and TBI communities and all revealed that they view positive behavioral supports as a good alternative or addition to medication. Most indicated satisfaction with their jobs and all expressed at least partial certainty that positive behavioral supports are useful in the TBI and elderly populations for the purpose of mitigating behavioral problems and increasing resident happiness. On average the behavior consultants spent between ten and thirty hours on each individual case and the number one frustration had to do with the skeptical attitude exhibited by some caregivers and providers. The general conclusion, however, from those working directly in the field, was in support of BSS and the continued expansion of such programs to support resident well being and a functional living environment within community care facilities.

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The overall goal of this study was to systematically analyze the relatively new intervention technique of positive behavior supports and its application to the elderly and TBI populations. Due to the tendency of overuse of psychotropic drugs in the current age and the information indicating their less than satisfactory usefulness in mitigating problem behaviors, new supportive techniques are necessary and those with promise deserve attention. This mode of support has already shown 86% success according to the data collected by Woollard Ipsen Management, as determined by retention of placement after intervention. However, a detailed description of behaviors, diagnoses, and suggested interventions was lacking. Therefore, I endeavored to explore these areas and found the results encouraging for the further development of positive behavior support programs. Furthermore, trends did appear in the data, linking some specific diagnoses to a higher probability of exhibiting certain behaviors. In addition, several intervention techniques were found to be most common and these specific suggestions could provide a starting point for behavior consultants newly entering the field as well as a foundation for further investigation.

Positive behavior supports show much promise as an alternative or, at the very least, an addition to psychotropic medications. To control a whole subset of the population with potent medications which can result in more rapid decline and a number of side effects, particularly when other, more viable options exist goes against the nature of progression and is a questionable care ethic. Furthermore, the fact that the majority of health care costs are incurred after the age of 65 and that much of this cost is related to failed resident placement and medications indicates that alternative intervention techniques are not only better for the health of the residents, but also for the financial stability of the health care system.

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Appendix A



Job Title: Behavioral Support Services Internship
Supervisor: Jana Hirsch

Behavioral Support Services Internship

Woollard Ipsen Management LLC has a contractual relationship with the State of Oregon Department of Human Services and Senior and Peoples with Disabilities to provide Behavioral Support Services (BSS) to 11 counties in Oregon. As part of this program Woollard Ipsen Management LLC is offer an internship to Rachel Woollard in 2013 for approximately 3 months at 20 hours per week.

Oregon Counties Woollard Ipsen Management provides BBS services:

1. Jackson
2. Josephine
3. Curry
4. Coos
5. Douglas
6. Klamath
7. Lake
8. Linn
9. Lane
10. Benton
11. Lincoln

Behavior Support Services Program Description

Woollard Ipsen Management LLC has a contract with the State of Oregon Department of Human Services and Seniors and Peoples with Disabilities to provide Behavioral Support Services to 12 Oregon Counties. Woollard Ipsen Management LLC was involved in the project pilot project since 2009 and was the first provider to successfully secure a long term contract with the State of Oregon to provide the Behavioral Support Services to a large geographical area in Oregon in 2012.

The goal of Behavior Support Services is to reduce the frustration, injuries, stress, placement failures and crisis situations that results when persons who have persistent and difficult behaviors are not provided with the support that they and their caregivers need. Activities focus on assisting

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caregivers to change their interactions with their client using the person's 24 hour environment to promote positive interactions, experiences and behaviors.

Behavioral Support Services is a new project, both to Woollard Ipsen Management and the State of Oregon. The program was taken State wide in August of 2012 and is gaining national attention as a potential method of reducing difficult behaviors in Community Based Care setting. The huge cost associated with failed placement and frequent movement of difficult residents in CBC setting is a national issue and the program shows huge potential in saving the Medicaid system significant funds.

Behavioral Support Services (BSS) are designed to help an individual maintain and attain a maximal level of emotional and social functioning. Services will focus on developing supports in the person's environment and improving interactions with caregivers in order to address:

- a) Challenging behaviors
- b) Cognitive processing
- c) Communication skills
- d) Self-help activities
- e) Impulse control and/or
- f) Adaptive skills.

Behavior Support Services are provided by a Behavioral Consultant and include:

- Assessment of all environmental, social, interpersonal and intrapersonal factors influencing the person's behaviors.
- Identification of the person's desires and preferences.
- Observation of the primary caregiver's abilities and routines and to assist with developing new strategies to minimize challenging behaviors and to encourage alternate behaviors.
- Development of a positive behavior support plan describing the procedures and interventions needed to support the agreed upon strategies.
- One to one instruction or "coaching" to caregivers so they can implement the positive support plan.
- Monitoring and revision of the behavior support plan as needed.
-

Woollard Ipsen Management is proud to provide these services to qualified State of Oregon clients and also to the private population.

Scope of Job Tasks

The following job assignments are not in order of importance. The Behavioral Support Services Intern is responsible to the BSS program director (Jana Hirsch) duties include, but are not limited to the following:

1. The primary task of the Behavioral Support Services Intern is to support and assist the BSS program director in fulfilling the BSS contractual directive.
2. Assist the BSS director in tasks as assigned.
3. Work with the BSS director, Woollard Ipsen Management LLC employees and the State of Oregon DHS employees to develop tracking methods for quality indicator in the BSS program.
4. Help to establish criteria for developing quality indicators.
5. Help to develop a tracking method for quality indicators..
6. Help to develop tracking tools for the success rate of the BSS program. Did the BSS program help maintain placement of the client in the Community Based Care setting.
7. Help collect quality indicator data and success rate data.
8. Help develop a presentation or report on the quality indicators and success date as appropriate.
9. Contact providers, clients and employees to determine success rate and quality of services delivery.
10. All other duties as assigned.

*These are non-essential job functions and may be modified as needed. The intent of the internship is to work with Woollard Ipsen Management LLC in helping define quality indicators and collect success rate data for the BBS program.

Job Specifications

Work Experience: Experience within a Community Care Based setting is desirable, but not required. Knowledge of public relations, economic conditions of the community desirable. Good writing and presentation development skills are imperative.

Physical Demands:

Work day...8 hours, more when necessary

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Stands...often, for short periods
Sits...often, for up to 3 hours
Walks...often, short distances
Bends...frequently
Stairs...rarely, but not necessary
Climbs...seldom
Lifts...often up to 30 pounds
Kneels...occasionally
Repetitive hand/foot...seldom

Supervision: Needs to be self-directed and possess the ability to make decisions. Works closely with BSS manager, and staff.

Working Conditions: Works in well-lit, well-ventilated offices. Deals with the public, personnel, visitors, family members and resident under many different circumstances. Works out of the facility often.

Responsibilities: To facilitate and promote the policies and procedures needed to provide quality care and services to the residents. To keep all personnel, resident and related matters confidential.

Perform all other duties as assigned by the BSS program director and Woollard Ipsen Management LLC executive staff.

ACKNOWLEDGEMENT

I _____ (please print name),
have read and understand the responsibilities of said position. I understand that this does not constitute a contract and that either the company or I may terminate my employment at will, with or without cause.

Employee's signature _____

Employer's signature  _____

Date 5/14/13

Date _____

Job Description BSS intern Last updated 5/13

Appendix B

WOOLLARD IPSEN MANAGEMENT, LLC
INITIAL CLIENT REVIEW & FUNCTIONAL ANALYSIS OF BEHAVIOR

Client Name: ²

Initial Date:

Case Manager:

Provider:

Provider RN:

CLIENT INFORMATION

DOB:

SS#:

Medicaid #:

Admit Date:

Family Contact:

MD:

CLIENT INTERESTS

ADL INFORMATION/COGNITION/COMMUNICATION/CARE NEEDS

DIAGNOSIS

² All fields with a line drawn through them will be removed from the intake forms provided to me by Woollard Ipsen Management prior to me seeing the forms, so as to protect resident privacy

MEDICATIONS

Medication Review Needed (yes/no)?

DESCRIPTION OF BEHAVIOR(S)

Referral's Description:

Provider's Description (initial statement):

Operation Description of the behavior(s):

- What does it look like?
- How often does it happen?
- How long does it last?
- Intensity?

History of Behavior:

- When did it begin? How long has it been going on?
- Is it getting worse or better?

Context of Behavior:

When is it most likely AND least likely to occur?

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- **Time of Day:**
- **Location:**
- **People Involved:**
- **Routines or Activities:**
- **Can you predict when it is going to happen?**
- **Is there a time or situation that it would NEVER happen?**

Pre-Sets of Behavior (diagnosis, medications, sleep/wake cycles, bowel habits, sensory deficits, personal history of client etc):

Setting Events:

Triggers/Cues:

Other Miscellaneous Info:

Initial Behavioral Recommendations:

Behavior Coach:

Date Completed:

Dates of BSS Involvement Dates:

Appendix C

	<p>Behavior Support Services Behavior Plan</p>
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Instructions:


- Form should be completed by the consultant within 20 business days of the initial assessment.
- Form should be reviewed and used as a teaching tool with client provider and caregivers.
- A copy should be left at the client's place of residence.
- A copy should be sent to the case manager within 5 business days of the plan completion.
- The case manager should keep a copy of this form in the client's file and narrate receipt of the form in Oregon ACCESS.
- The consultant has expectation to review and update during monitoring visits as needed.

<u>Date:</u> 	<u>Client name:</u> 	<u>Behavior consultant:</u> 	<u>Review Dates:</u> 		
Behavioral Issue		Behavior Strategies		Responsibility	Goals and Expected Outcomes
		<p><u>Support to prevent behavior:</u></p> 			
		<p><u>What to do when behavior starts:</u></p> 			

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Behavioral Issue	Behavior Strategies	Responsibility	Goals and Expected Outcomes
	<u>Support to prevent behavior:</u>		
	<u>What to do when behavior starts:</u>		
Personal centered information			
<u>Social Stimulation:</u>			
<u>Support Systems:</u>			
<u>Recommendations to provider:</u>			

Appendix D*

 <p>Oregon Department of Human Services Aging and People with Disabilities Behavior Support Services</p>	<h2>Behavior Support Services Feedback Form</h2>
<p>This information is being collected to help the Aging and People with Disabilities office evaluate and improve Behavior Supports' new service.</p>	
<p>Instructions for provider and case manager: Please complete and fax to 503-373-7823 or email form to Linda Woelke at Linda.j.woelke@state.or.us or return to a local office.</p>	
Date completed:	[Redacted]
Information source (check one):	<input type="checkbox"/> Case manager <input type="checkbox"/> Caregiver
<input type="checkbox"/> Administrator	<input type="checkbox"/> Other: [Redacted]
Client name (optional):	[Redacted]
Client ID (date of birth or prime number):	[Redacted]
Residence type:	<input type="checkbox"/> Adult foster home <input type="checkbox"/> Residential care facility
<input type="checkbox"/> In-home agency <input type="checkbox"/> Assisted living facility	<input type="checkbox"/> In-home
Address:	ZIP code:
[Redacted]	[Redacted]
Dates of service:	[Redacted]
Does the client still reside at your community? <input type="checkbox"/> Yes <input type="checkbox"/> No	
If no, please explain reason for change: {Narrative field}	
Please tell us what you liked best about this service: {Narrative field}	
Please describe any improvements you think we can make to this service: {Narrative field}	

<p>Service evaluation (please indicate your answer in the space provided below using the numbers below):</p>		
N/A – Not applicable	1 – Strongly disagree (please add comment)	2 – Disagree
3 – Neutral	4 – Agree	5 – Strongly agree

<div style="background-color: #cccccc; width: 20px; height: 20px; margin: 0 auto;"></div>	<p>1. The behavior plan and/or behavior recommendations helped maintain this client's placement.</p>
	<p>Comment: [Redacted]</p>
<div style="background-color: #cccccc; width: 20px; height: 20px; margin: 0 auto;"></div>	<p>2. One or more of the client's behaviors have decreased.</p>
	<p>Comment: [Redacted]</p>
<div style="background-color: #cccccc; width: 20px; height: 20px; margin: 0 auto;"></div>	<p>3. Interactions between this client and his/her caregivers have become more positive.</p>
	<p>Comment: [Redacted]</p>
<div style="background-color: #cccccc; width: 20px; height: 20px; margin: 0 auto;"></div>	<p>4. Caregiver workload was reduced or more effective as a result of this service.</p>
	<p>Comment: [Redacted]</p>

*Note: Client Name, Client ID, and any other identifying field will be removed from the form prior to me seeing it, so as to protect resident privacy. No identifiers will be viewed or used in any way for this study. 4

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Service evaluation (please indicate your answer in the space provided below using the numbers below): N/A – Not applicable 1 – Strongly disagree (please add comment) 2 – Disagree 3 – Neutral 4 – Agree 5 – Strongly agree	
T	5. Case manager workload for this client was reduced or is more effective as a result of this service. Comment: <input type="text"/>
T	6. The Behavior Support Services (BBS) consultant was timely with recommendations, visits and paperwork. Comment: <input type="text"/>
T	7. The BSS consultant was a good teacher/coach. Comment: <input type="text"/>
T	8. I would use this service again. Comment: <input type="text"/>

*Note: Client Name, Client ID, and any other identifying field will be removed from the form prior to me seeing it, so as to protect resident privacy. No identifiers will be viewed or used in any way for this study.

Appendix E

Interview Questions

To be Issued to Behavior Consultants 1-5

1. How long have you been working with Woollard Ipsen as a Behavior Consultant?
2. Do you find your job fulfilling?
3. Do you think providers are receptive to your behavior suggestions on a whole?
4. What do you do when providers are skeptical of the program or refusing to participate in the capacity you deem necessary for behavior changes to be seen?
5. Have you found any patterns in your work? i.e. What is the most common diagnosis you see in individuals with behavior problems? Are there any diagnosis that are particularly easy or difficult to work with? Are there any behavioral suggestions you find yourself using often for a variety of cases that seem to work or any behavioral suggestions that seem to work best with individuals with specific diagnosis?
6. In your opinion are positive behavior supports helping the geriatric and TBI populations?
7. Is this a program you think should continue to expand?
8. Do you think positive behavior supports could be a good addition or alternative to the overuse of psychotropic medications in the residents you see?
9. Do you have any additional comments?

Appendix F

Observational Criteria

For Direct Observation of Behavior Consultants 1-5

All questions will be answered numerically using numbers 1 through 5 in which 1 indicates strong agreement with the statement, 2 indicates agreement with the statement, 3 indicates partial agreement, 4 indicates disagreement with the statement, and 5 indicates strong disagreement with the statement.

1. The Behavior Consultant has a positive demeanor while working.

1 2 3 4 5

2. The Behavior Consultant attempts to converse with the provider and actively pursues contact if struggling to get time with the provider

1 2 3 4 5

3. The Behavior Consultant attempts to converse with all support staff relevant to the care of the resident in order to glean their opinions of the problem and actively begin implementing solutions. The Consultant makes active attempts to do this even if it poses difficult. Support staff includes but is not limited to; caregivers, med aids, housekeeping, and dining staff.

1 2 3 4 5

4. The Behavior Consultant speaks to all providers and support staff in a way that is accessible to their level of understanding and is relevant to their roles.

1 2 3 4 5

5. The Behavior Consultant actively listens to providers and support staff and offers insight and support in a way that is clear and polite.

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1 2 3 4 5

6. The Behavior Consultant attempts to make contact with the resident during the visit and if the resident is lucid makes friendly talk with them while still asking about their concerns, interests, and ideal living dynamic.

1 2 3 4 5

7. If it is deemed necessary the Behavior Consultant will organize a staff training session in order to better offer support services.

1 2 3 4 5

8. The Behavior Consultant comes up with creative solutions and resources for behavior supports, including but not limited to; finding community resources relevant to the interests/needs of the resident (e.g. transport to a church service the resident has indicated interest in), finding behavior supports already existent within the residents living environment that could be augmented or refined, finding areas of compromise between residents and providers.

1 2 3 4 5

Appendix G

List 1: List of Counties Contracted Through the State of Oregon with Woollard Ipsen

Management LLC for Behavior Support Services

1. Jackson County
2. Lane County
3. Douglas County
4. Deschutes County
5. Linn County
6. Coos County
7. Josephine County
8. Curry County
9. Benton County
10. Lincoln County
11. Crook County
12. Klamath County
13. Jefferson County
14. Wasco County
15. Lake County
16. Harney County
17. Gilliam County
18. Sherman County
19. Wheeler County
20. Hood River County

**Appendix H
Adult Consent Form**

**Positive Behavior Supports:
An Alternative to the Overuse of Psychotropic Drugs**

You are invited to participate in a research study conducted by Rachel Woollard and Thomas Kindermann (Primary investigator) from Portland State University. The researchers hope to investigate the efficacy of Woollard Ipsen Management's Behavioral Support Services program in utilizing positive behavior supports to mitigate problem behaviors. This study is being conducted for the purpose of writing an Undergraduate Honor's Thesis in partial fulfillment of the requirements for a degree from the Honors Program and is being supervised by Thomas Kindermann, a professor of Psychology at Portland State University. You were selected as a possible participant in this study because you are one of Woollard Ipsen Management's Behavior Consultants and therefore instrumental in the overall functioning of the Behavior Support Services program.

If you decided to participate, you will be asked to allow Rachel Woollard to shadow you on four different days while visiting residents and/or providers in various locations throughout the counties contracted with Woollard Ipsen Management as well as answer interview questions. All observational data regarding how you, as the Behavior Consultant, fulfill your job tasks will be recorded using an observational system and rating scale (a copy of which you make request to see). While participating in this study it is possible that information of a sensitive nature (private information about you as an individual) will come to light, however, no information not related to the functioning of the Behavior Support Services program will be recorded and no information regarding your general performance as an employee will be released in any form to anyone-including Woollard Ipsen. You may not receive any direct benefit from taking part in the study, however, the study may help increase knowledge about the efficacy of positive behavioral supports for the geriatric and traumatic brain injured communities and therefore has the potential to benefit Woollard Ipsen's specific program, as well as related future programs.

Any information that is obtained in connection to this study and that can be linked to you or your identity will be kept confidential. Your name will not be released in any form, nor will any information that could possibly lead back to you. This information will be kept confidential by assigning you a number when recording information and if any mention of you does occur in the final thesis, it will be a numerical mention only. However, we do not foresee mentioning any specific details about any one Behavior Consultant in the thesis, but rather the Behavior Consultants on a whole.

Your participation is voluntary. You do not have to take part in this study and it will not affect your employment with Woollard Ipsen Management in any way. You may also withdraw from this study at any time without affecting your employment with Woollard Ipsen Management.

Your signature indicates that you have read and understand the above information and agree to take part in this study. The researcher should provide you of a copy of this form for your own records.

Positive Behavior Supports-an Alternative to Overuse of Psychotropic Drugs

Signature

Date

Print Name

If you have any questions regarding the nature of this study please contact Rachel Woollard by phone at (541) 690-4846 or by email at rachelwoollard@ymail.com

If you have any questions regarding your rights as research subjects please feel free to contact the Office of Research Integrity at 1600 SW 4th Ave., Market Center Building, Ste. 620, Portland, OR 97207; phone: (503) 725-2227 or 1 (877) 480-4400.