

RACE, IMMIGRATION STATUS AND JOB SATISFACTION OF CERTIFIED NURSING
ASSISTANTS

by

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ABSTRACT

Certified Nursing Assistants (CNAs) provide up to 90% of direct care to long-term care residents. Unfortunately, CNAs have an extraordinarily high turnover rate that is accompanied by low levels of work satisfaction. A largely qualitative body of literature has indicated that perceived lack of respect and perceived discrimination drive job satisfaction differently in CNAs of different race/ethnicity. This quantitative study examined CNA job satisfaction with an emphasis on race, immigration status, dementia training, respect, and perceived discrimination. Secondary data analysis of the National Nursing Assistant Survey used information from 3,017 nursing assistants in 1,500 nursing facilities, including data on training, supervision, client relationships, and workplace environment. This study looked at a sample of 2,352 participants; 61.3% were Non-Hispanic Whites (NHWs) and 31.4% were African Americans (AAs); 89% were US born citizens, 4.2% immigrants, and 6.8% citizens through naturalization. Path analyses indicated that race predicts job satisfaction, and that both respect and discrimination partially mediate that association. This pattern of findings was consistent across both racial groups. These effects varied with age. Immigration status and dementia training were hypothesized to moderate these effects by improving understanding of problem behavior, yet neither hypothesis was supported. These results highlight the complex nature of CNA job satisfaction in long-term care.

DEDICATION

This thesis is dedicated to my family, boyfriend, friends, and colleagues who have both helped and guided me through the both the process of creating this manuscript, as well as my academic career thus far.

LIST OF ABBREVIATIONS AND SYMBOLS

α	Cronbach's alpha: used to measure internal consistency
β	Beta: a standardized partial regression coefficient
M	Mean: the sum of a set of measurements divided by the number of measurements in the set
N	Sample size of group
p	Probability associated with the occurrence under the null hypothesis of a value as extreme as or more extreme than the observed value
r	Pearson product-moment correlation
t	Computed value of t test
SD	Standard Deviation: value of variation from the mean
χ^2	Chi-square: test of significance of model fit
$\Delta\chi^2$	Delta chi-square: used to test the difference in fit between two models
$<$	Less than
$>$	Greater than
$=$	Equal to

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CHAPTER 1

INTRODUCTION

The Importance of the CNA

Certified Nursing Assistants (CNAs) are an integral part of the workforce in long-term care facilities. In fact, CNAs provide up to 90% of direct care to residents of nursing homes, so it is important to ensure their work is appreciated and valued (Pennington, Scott, & Magilvy, 2003). Certified nursing assistants have an extraordinarily high turnover rate that is accompanied by low levels of work satisfaction (Bishop, Squillace, Meagher, Anderson, & Wiener, 2009; Cready, Yeatts, Hosdin, & Potts, 2008).

Research has indicated that this satisfaction can be mediated by perceived discrimination and perceived respect in the workplace. As an in-depth literature review later in this thesis will show, there are several factors that modify this relationship. In this proposed project, I will be exploring whether respect and discrimination can affect the relationship between race and job satisfaction, as well as whether immigration status and dementia training further modify these relationships.

In today's society, CNAs are younger, more educated, and more likely to hold full-time positions than CNAs in the past (Yamada, 2002). The same research has also suggested that CNAs are less likely to be US citizens now compared to 10 years ago. This is important for quality of care, and a central focus of this proposal. Regarding demographics, 92% of CNAs employed in nursing homes are female. Nearly half of all female employees are non-White, and 9% are non-US citizens (Squillace, Bercovitz, Rosenoff, & Remsburg, 2008). Other studies have

indicated that 13.9% of nursing assistants are immigrants. Additionally, immigrants were more often better educated and more likely to be non-White than US born CNAs (Sloane, Williams, & Zimmerman 2010).

The Problem of Turnover

When looking at quality of the long-term care facility, the problem of turnover and satisfaction is very important. CNAs have been found to have an astounding turnover rate of 74.5% (The National Nursing Home Survey, 2004). This was the highest turnover rate of all nursing home staff (Donoghue, 2010). Other research within the last decade has pointed to similar turnover rates (American Health Care Association, 2003; Castle, & Engberg, 2005). Staff turnover has costly implications for the nursing home at the administrative level, staffing level, and resident quality of care level (Institute for the Future of Aging Services, 2007).

Research has indicated that there are many characteristics that can determine CNAs' intent to leave their jobs. Some of the important factors include facility-level characteristics such as supervisory qualities and benefits, and individual characteristics such as income and education of the CNA (Stearns, & D'Arcy, 2008). Other studies suggest that positive relations with staff and residents help retain CNAs in their position (Pennington, 2005). Not only has research shown these factors to improve CNA retention rates, facility-level characteristics and positive relations have also been found to improve nursing home environment and quality of care in its entirety (Scott-Cawiezell et. al, 2005). It is crucial to keep these factors in mind when examining preventative measures for job turnover amongst CNAs. Not only will this help protect the residents of nursing homes, it can also protect the industry as a whole, by saving up to 4 billion dollars in costs associated with CNA turnover (Institute for the Future of Aging Services, 2007).

There are several factors, both intrinsic and extrinsic, that motivate CNAs to stay at their jobs. A recent study suggests that some of the extrinsic rewards of the job are wages, benefits, and job security; factors such as training, mentoring, organizational culture, and personal characteristics increase intrinsic motivation (Wiener, Squillace, Anderson, & Khatutsky, 2009). This study identified other factors that affect job tenure, including training and career development, worker characteristics and opinions, facility characteristics, and area characteristics.

Respect as a Driver of Job Satisfaction and Job Tenure

Involving and empowering workers, providing more feedback, and encouraging more autonomy at work are all positively associated with job satisfaction. Another major component of this is respect (McGuire, Houser, Jarrar, Moy, & Wall, 2003), which is usually measured from the viewpoint of the respondent, and thus represents perceived respect.

Respect is one of the key factors to CNAs' success in their jobs. Lack of respect was the top reason identified as causing turnover in direct care staff (Mittal, Rosen, & Leana, 2009). It would be difficult to treat the issue of turnover amongst CNAs without exploring the idea of respect. Research has found that respect consistently drives job satisfaction and job tenure. For example, job satisfaction is higher when CNAs feel more respected and valued by their peers and supervisors (Bishop, Squillace, Meagher, Anderson, & Wiener, 2009). In addition, the same study found that good relationships with supervisors were also important when addressing staff satisfaction.

We need to foster respect amongst CNAs in order to improve job satisfaction and eventually, retention rates. Demonstrating appropriate levels of respect and appreciation to

CNAs seems to be associated with significantly higher retention (Bowers, Esmond, & Jaconson, 2003). This is especially important when exploring job turnover amongst immigrant direct care workers.

Race and Immigration

Because the CNA workforce is so diverse, it is important to look at whether race/ethnicity and immigration status have a particular bearing on job satisfaction. A previous study found that there are, in fact, differences in job satisfaction and intrinsic motivation depending on racial/ethnic diversity (Friday, & Friday, 2002). Intrinsic job factors (those attributed to the CNAs themselves) are essential when looking at overall job satisfaction and intention to leave. These intrinsic job factors include personal characteristics such as race and current job tenure. All of these characteristics make up a more positive “intrinsic” job satisfaction, which in turn decreases intent to leave (Decker, Harris-Kojetin, & Bercovitz, 2009). Unfortunately, this relationship is not explored very often amongst CNAs in the workplace.

Pre-existing literature also suggests that immigration status plays an important role in determining perceived respect amongst direct care workers. For example, immigrant workers, who more often reported feeling less respected by residents and families of long-term care facilities, were more likely than US born workers to report intent to leave their current long-term care facility within one year (Sloane, Williams, & Zimmerman 2010).

Race does play a role in the communication styles of CNAs with residents as well as other staff at their facility. For example, one study found that African American CNAs were more likely to report poorer agreement with family members regarding nursing care expectations. This predicted poor treatment for residents as per family, in that the family

perceived that the residents were treated poorly. This in turn predicted increased perception of conflict (i.e. miscommunication) by both CNAs and family (Abrahamson, Pillemer, Sechrist, & Sutor, 2011). Similarly, Berdes and Eckert (2012) found that CNAs felt they had different care expectations depending on their race. For example, CNAs stated that White workers are expected to carry out problem-solving tasks, while minority staff are expected to carry out menial tasks.

The same study also showed perceived racism not only toward workers of various race but also on the basis of immigration status. African immigrants were more likely to report experiencing more racism than African Americans. They also often felt prejudice from their own coworkers due to their immigration status. Fortunately, immigration status is slowly being given more emphasis when looking at CNAs' job satisfaction. Not understanding this relationship could be detrimental to the quality of care a resident receives (Bourgeault, Atanackovic, Rashid, & Parpia, 2010).

Race and Discrimination as Drivers of Respect and Job Satisfaction

We know that race and discrimination are drivers of respect and job satisfaction. A study that yielded data on gender differences found that race and citizenship status more strongly predict work satisfaction than gender (Rakovski, & Price-Glynn, 2010). Unfortunately, racism does not just come from the residents or family members. Discrimination frequently occurs amongst different ethnic groups that work at the same facility (Ryosho, 2011). This study indicated that many workers preferred to stay within their own ethnic group, and did not prefer interacting with other ethnic groups.

Ryosho (2011) also pointed out that US born workers reported feeling that foreign born aides were prejudiced against them. As previously mentioned, though, other studies point out

that foreign born CNAs often feel discriminated against by US born CNAs. Additionally, foreign born staff identified more frequent and more severe racism towards them from their fellow employees (Jonson, 2012).

Dementia Training

Little is known about the efficacy and effectiveness of dementia training programs implemented in nursing homes to direct-care staff such as CNAs. In fact, most research that evaluated specific dementia care programs had such methodological weaknesses that conclusions could not be drawn about the effects of this intervention (Kuske et. al, 2007). This lack of appropriate dementia training efficacy is visible not only in nursing homes, but also specifically in dementia special care units (SCUs). Even in these dementia specific units, direct care staff are not being appropriately trained to meet the needs of dementia residents (Beck, Ortigara, Mercer, & Shue, 1999).

Beck, Ortigara, Mercer, and Shue (1999) identified several factors that are applicable barriers to dementia training amongst CNAs. For example, they identified immigration status as a social factor in dementia training. Foreign born aides may have language barriers or cultural beliefs and attitudes that change their views on dementia and affect their ability to profit from training. Race/ethnicity was also a social factor associated with dementia training. Even though CNAs stated that they had some knowledge about dementia, discriminatory language and behaviors from dementia residents still “hurt” the CNAs. These situations were often not appropriately followed up on by higher up staff.

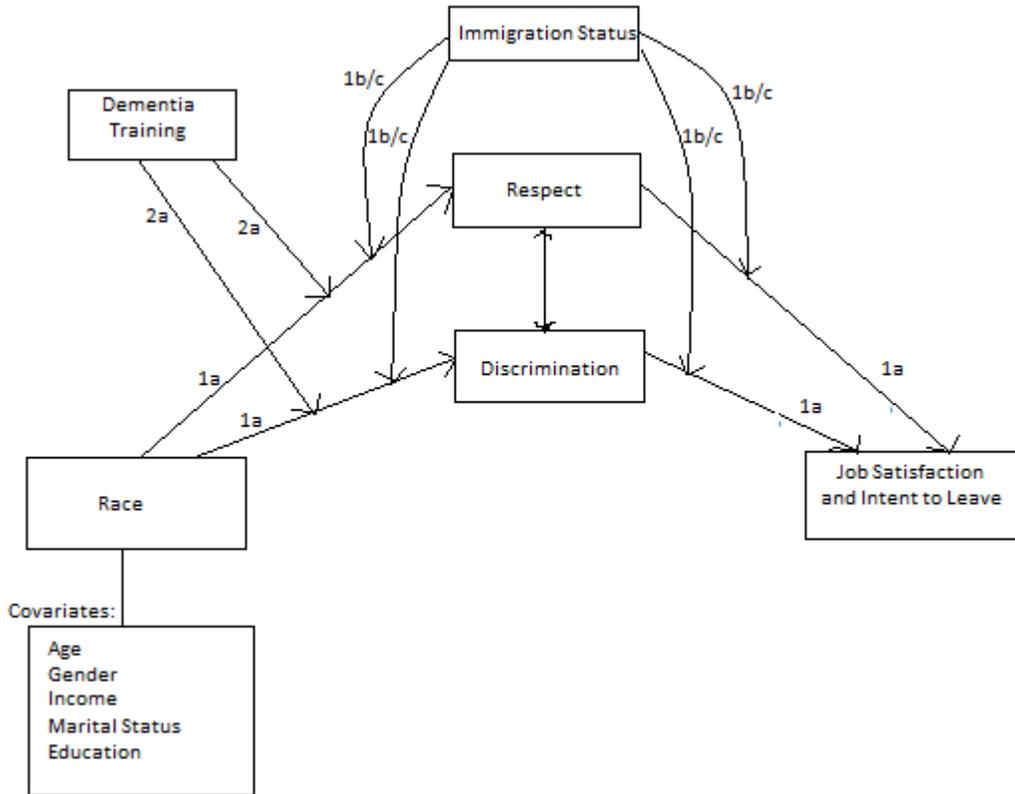
The use of training manuals about dementia care by CNAs is quite infrequent. In SCUs, 46.8% of CNAs reported using these manuals, and in non SCUs, only 27.5% of CNAs used these

manuals. Non SCUs in an SCU facility reported usage of 37.3%; however, in non SCUs in non SCU facilities, only 15.1% of CNAs used a dementia care training manual (Grant, Kane, Potthoff, & Ryden, 1996). This is surprising, as dementia care training seems to be a possible predictor of job satisfaction in a few different ways. One study found that when facilities provided training programs on dementia and working with cognitively impaired residents, employees reported decreased levels of racism from those residents (Ramirez, Teresi, & Holmes, 2006). This also led to more positive attitudes toward the residents themselves.

Respect and discrimination affect the relationship between race and job satisfaction in that certain races/ethnicities perceive less respect and increased discrimination, which decreases their job satisfaction. Immigration status shakes this relationship because regardless of race/ethnicity, immigrants feel less respect and more discriminated, than US born aides. This could potentially be complicated even further by the effects that dementia training may have on perceived respect and job satisfaction. Certified nursing assistants face challenges that can threaten the quality of care being provided to nursing home residents.

Hypothesis:

Although some research has been done on race/ethnicity, immigrant status, perceived respect, perceived discrimination and dementia care skills among CNAs in long-term care facilities, no models have been formed to depict interrelationships among all of these factors. Additionally, there are no published studies that have simultaneously examined these factors. This project will address the gap in the literature and posits the following hypothesized model:



Based on the model, my hypotheses are as follows:

1a. As compared to non-Hispanic White CNAs, persons of African Descent are more likely to perceive increased discrimination and perceive less respect, which in turn decreases their job satisfaction and job tenure (Rakovski, & Price-Glynn, 2010; Ryosho, 2011).

1b. Immigrant Africans are more likely to be affected by this relationship than citizen African Americans (Ryosho, 2011; Johnson, 2012).

1c. White immigrants will also show this relationship, but to a lesser degree than persons of African Descent (Friday, & Friday, 2002).

2a. The more or better rated dementia training a CNA receives, the less discrimination and more respect they feel (Ramirez, Teresi, & Holmes, 2006).

CHAPTER 2

METHODOLOGY

Data

This secondary data analysis looked at data from the 2004 National Nursing Assistant Survey (NNAS). This survey is a part of the 2004 National Nursing Home Survey, which was sponsored by the U.S. Department of Health and Human Services in order to characterize the long-term care workforce. This survey selected 4,542 nursing assistants from 1,500 nursing facilities in the United States, 3,017 of whom participated in the survey. Telephone interviews were conducted to obtain information on education/training/licensure, job history, family life, management/supervision, client relations, organizational commitment, workplace environment, work-related injuries, and demographics. Both current CNAs and those who had left their jobs, “facility leavers”, were interviewed.

Participants

Two thousand eight hundred ninety-seven participants were currently working at the nursing facility while taking this survey, whereas 120 had left their jobs. As I am exploring currently employed CNAs at this time, facility leavers were excluded from the analysis. The analyses conducted examined differences between two race groups: African Americans (AAs) and Non-Hispanic Whites (NHWs). One thousand five hundred four NHWs participated in the survey. Age range for this group of participants was 16-65, with a mean age of 36.50 (SD = 13.321). Ninety-eight NHW respondents were male, and 1406 were female. With regard to the AA group, 848 participants completed this survey. Age range for this group of participants was 17-65, with a mean age of 38.02 (SD = 11.312). Sixty eight AA respondents were male, and 780

were female. This resulted in a final sample size of 2,352. Refer to Table 1 for sample descriptives, including marital status, education, income, and immigration status.

Measures

Covariates and Single-Item Variables

The following demographics were planned to be used as covariates: age, gender, marital status, education, and income. Race is a single-item variable characterized by responses to the question “I’m going to read you a list of five race categories. Please choose one or more races that you consider yourself to be.” Participants were chosen for my sample if they responded 1 = NHW or 2 = AA. Immigration status was categorized into 3 groups: US born, Naturalized, and Resident/Alien. Participants answered the following questions to determine these groups: “Are you a citizen of the United States?” and “Were you born a citizen of the United States, or did you become a citizen of the US through naturalization?”

Upon completing scale construction, standardized (normalized) scores were developed for each variable. The purpose of normalizing the data was so that the different scales could be easily compared and contrasted on the same metric. The immigration status variable was dummy coded as follows: Citizen 1 (Citizen not through naturalization: Y/N); Citizen 2 (Immigrant: Y/N); and Citizen 3 (If citizen, through naturalization: Y/N). Refer to Table 1 for sample descriptives.

Job Satisfaction Construct

Job satisfaction was measured by responses to questions such as “statements about your supervisor,” and “how satisfied are you with your job.” See Appendix A for a complete list of

job satisfaction items. Responses to the item, “how likely is it that you will leave this job at {SAMPLED FACILITY} in the next year?” will be used to represent intent to leave, as an additional measure of job satisfaction. The job satisfaction scale ($M=1.81$, $SD=.71$) is a 15-item scale that yields scores on a 1-4 metric. An average of all individual items was computed in order to develop the scale metric. For all items on the scale, low scores indicate high satisfaction, and high scores indicate low satisfaction. These 15 items yielded a Cronbach’s alpha of .899, suggesting appropriate reliability.

Respect Construct

Respect was measured by responses to questions such as “I am appropriately respected or rewarded by my nursing facility for my work” and “to what degree do you feel residents respect you, as part of their health care team?” Refer to Appendix B for complete list of respect scale items and how they were scored. Responses to these items were summed, and the average of 6 items used as a composite measure of respect. The resulting respect scale ($M=4.20$, $SD=1.24$) has a range of 3-10 in which lower scores indicate being treated respectfully by family/residents/supervisor, and high scores indicate less respect. Cronbach’s alpha for this 6-item scale was .726, suggesting adequate reliability.

Discrimination Construct

Discrimination was measured using one variable. The question representing this variable asks “on this job, were you ever discriminated against because of your race?” in which “1” indicates no and “4” indicates yes.

Dementia Care Construct

Dementia care training was determined using two items. The first item asks how well the initial CNA training prepared the respondent for dementia care (1 = excellent through 4 = not offered), and the second item asks whether continuing education classes covered dementia training (1 = Yes and 4 = No). See Appendix D. The dementia training construct (M=1.26, SD=1.43) is a scale of 1.00-4.00 in which lower scores indicate positive experiences with dementia training, and higher scores indicate poor or no dementia training. Cronbach's alpha for this 2-item scale is .357. Although this is a low number, this is typical for scales with fewer items (Pallant, 2007 p. 95). The inter-item correlation for this scale was .225, indicating adequate reliability.

Data Analysis Plan

Analyses were preceded by data cleaning. This consisted of obtaining the file from the Center for Mental Health and Aging (CMHA) archives, extracting the items of interest, setting up an analytic file, and checking for the integrity of the data. The next step was to conduct preliminary analyses. This included descriptive statistics as well as checking for missing data, assessing for normality, transforming or reversing any variables as needed, and scale construction.

Next, I examined zero-order correlations among race, respect, discrimination, dementia training, immigration status, and the dependent variable, job satisfaction to determine whether or not significant relationships exist amongst the variables and their strengths.

The final part of the analysis involved testing the hypothesized model in two phases using the structural equation modeling (SEM) software, MPlus. The first analysis was a mediation model, in which respect and discrimination served as mediators between race and job

satisfaction. For the second path analysis, I examined moderated mediation models, in which dementia training and immigration status served as separate moderators of the hypothesized mediated paths. Bootstrapping was used to generate standard errors of the indirect parameters, in order to account for asymmetries in the data.

CHAPTER 3

RESULTS

Preliminary Analyses

Descriptive Statistics

The core sample of this project is 2,352; however, for the dementia training construct only a subsample of 1,857 participants were examined. Since the dementia training construct is a two-item scale, any participant who had missing values for either of the two variables was not included in the analysis. This excluded 495 participants from the dementia training analyses. Basic descriptive statistics of primary variables can be found in Table 2 which displays the Ns, minimum and maximum scale values, mean, and standard deviations.

One-way ANOVAs were run between race and the four primary scales: job satisfaction, respect, discrimination, and dementia training. There was a statistically significant difference for race and job satisfaction: $F(1, 2331) = 4.61, p < .05$; indicating that AAs ($M = 1.853, SD = 0.716$) report less job satisfaction than NHWs ($M = 1.790, SD = 0.718$), with small effect size (Cohen's $d = .1$). There was also a statistically significant difference for race and perceived respect: $F(1, 2326) = 24.328, p < .001$; indicating that AAs ($M = 4.367, SD = 1.344$) report less perceived respect than NHWs ($M = 4.103, SD = 1.344$), with small effect size (Cohen's $d = .2$). Additionally, there was a statistically significant difference for race and perceived discrimination: $F(1, 2325) = 55.684, p < .001$; indicating that AAs ($M = 1.34, SD = 0.946$) report more discrimination than NHWs ($M = 1.10, SD = 0.550$), with small effect size (Cohen's $d = .25$). Lastly, there was a statistically significant difference for race and dementia training: $F(1, 1570) = 44.211, p < .001$; indicating that AAs ($M = 0.960, SD = 0.953$) report better rated dementia training than NHWs ($M = 1.454, SD = 1.650$), with medium effect

size (Cohen's $d = .5$)

Covariates

Five covariates were initially hypothesized: age, gender, income, marital status, and education. In order to test the significance of these covariates, separate ordinary least squares (OLS) regression analyses were run, using all covariates as predictors of the primary variables (race, discrimination, respect, and job satisfaction).

For the respect scale, the overall model was significant, $F(5, 2664) = 3.92, p < .05$, adjusted $R^2 = .005$, and age proved to be the only significant variable, $\beta = -.077, p < .001$. When regressing the covariates onto the job satisfaction scale, the overall model was not significant, $F(5, 2664) = 1.96, p < .09$. With regards to discrimination, discrimination was regressed onto the three continuous covariates (age, income, and education). The overall model was not significant, $F(3, 2671) = 1.18, p < .40$. Chi-square analyses examined discrimination and the two categorical covariates, gender and marital status, and neither proved to be significant. Based on these findings, gender, marital status, income and education were discarded, leaving one covariate in the final model: age. A one-way ANOVA was run between the only covariate, age, and race. There was a statistically significant difference for race and age: $F(1, 2350) = 7.85, p < .01$; indicating that AAs ($M = 38.02, SD = 11.312$) are older than NHWS ($M = 36.50, SD = 13.321$).

Factor Analysis

A principal factor analysis was run in order to determine whether the components of the job satisfaction scale loaded unidimensionally or multidimensionally. Although the analysis yielded two distinct factors, scree plots indicated that the underlying structure of the scale was unidimensional. Cronbach's alpha for all items ($\alpha = .90$) also suggests that the underlying

construct is unidimensional; therefore, the job satisfaction scale was constructed to consist of a single composite, as described above.

Correlations

Zero-order correlations were calculated between age (the only covariate that emerged as significant) and each of the other key measures separately for AAs and NHWs. Refer to Table 4 for correlations among dementia training, discrimination, respect, job satisfaction, and age. R-to-z transformations were conducted to test for differences amongst significant correlations. When examining dementia training and respect, no significant group differences were found ($z = .009$). When examining dementia training and job satisfaction, significant group differences were found ($z = 0.164$) suggesting that NHWs who rated dementia training higher reported greater job satisfaction than AAs. When examining both discrimination and respect, and discrimination and job satisfaction, no significant group differences were found ($z = .060$, $z = .093$, respectively). When examining job satisfaction and respect, no significant group differences were found ($z = .006$). Lastly, when comparing age and job satisfaction for both groups, significant group differences were found ($z = .079$) suggesting that older AAs rate lower levels of job satisfaction than NHWs.

There were significant correlations between variables for the AA sample that were not observed among NHWs. For instance, AAs showed a significant positive relationship between dementia training and discrimination ($p < .05$). An r-to-z transformation revealed significant z-score differences between AAs and NHWs ($z = 0.075$), indicating that whereas AAs with higher quality dementia training experienced less discrimination on the job, there was no such association for NHWs. Additionally, AAs showed significant negative correlations between

dementia training and age, and between dementia training and job satisfaction ($ps < .05$). An r -to- z transformation comparing AAs and NHWs showed a significant z -score difference on the correlations of dementia training with age ($z = -0.067$). This suggests that dementia training is rated better as age increases amongst AAs. Refer to Table 4 for correlations.

Path Analyses

Respect and Discrimination as Mediators – Hypothesis 1a:

Mediation is an indirect effect of a predictor (independent variable) on an outcome (dependent variable). Preacher, Rucker, and Hayes (2007) highlight the importance of using structural equation modeling in order to identify mediation effects. In a significant mediation effect, the direct association between the predictor and the outcome is statistically smaller. Several strategies can be used in SEM to gauge the extent and significance of the indirect effect of a mediator, including causal steps strategy and distribution of the product strategy. In the present model, product of coefficients strategies and bootstrapping (1,000 replications) were used to generate a standard error based on the distributive properties of the sample (rather than the normal distribution) for testing the significance of the mediation effect. Preacher and Hayes (2004) report that the bootstrapping technique is the most appropriate way to estimate standard errors for indirect effects.

In the first model (see Figure 1), I ran the mediation model, in which respect and discrimination served as mediators between predictor variable race and outcome job satisfaction, at the same time. The covariate, age, was also included in this model.

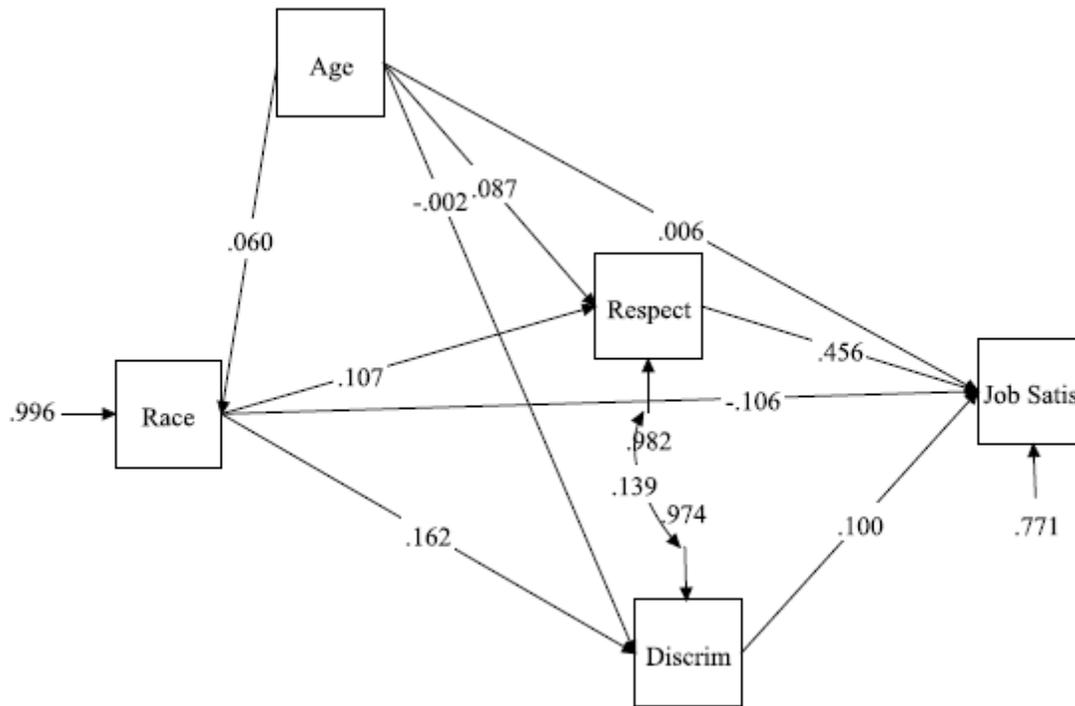
The final model was fully saturated (just-identified), and the resulting model fit was by definition perfect, $\chi^2(2, N = 2796) = 0.00, p = 0.0, CFI = 1.00, TLI = 1.0, RMSEA = .00$ (C.I.

0.0 – 0.0), SRMR = 0.00. Chi-square is the classic goodness of fit index. A significant chi-squared value indicates poor model fit, and may warrant rejection of the null hypothesis. The chi-square test is extremely sensitive to sample size, however; thus, researchers agree that fit indices such as the root mean square error of approximation (RMSEA), Tucker-Lewis Index (TLI), Comparative Fit Index (CFI), and standardized root mean square residual (SRMR) can provide more accurate information about model fit. In this model, the results indicated that all direct paths and two indirect paths of the model were significant. The direct paths are as follows:

The results indicated that race contributed significantly to prediction of job satisfaction ($\beta = -0.106, p < .001$). Race also significantly predicted both respect ($\beta = 0.107, p < .001$) and discrimination ($\beta = 0.162, p < .001$). The results also showed that both respect ($\beta = 0.456, p < .001$) and discrimination ($\beta = 0.100, p < .001$) significantly contributed to the prediction of job satisfaction. Lastly, as for simple product-moment coefficients reported earlier, respect and discrimination significantly correlate with one another ($\beta = 0.139, p < .001$).

An examination of indirect effects revealed that the indirect effect of race through respect predicting job satisfaction ($\beta = 0.05, p < .001$) and race through discrimination predicting job satisfaction ($\beta = 0.02, p < .001$) were both significant. These results held across both race groups (NHW and AA).

Figure 1.



Immigration Status as a moderated mediator – Hypothesis 1b & 1c:

Moderated mediation models attempt not only to identify associations between variables, but also to explain how effects occur. A moderated mediation occurs when a mediation is contingent upon the level of a moderator (Preacher, Rucker, & Hayes, 2007). Model 2 posits that immigration status serves to moderate the race-respect, race-discrimination, discrimination-job satisfaction, and respect-job satisfaction relationships identified in the mediation model previously confirmed, suggesting moderated mediation. Again, the bootstrapping technique was used to generate distribution-based standard errors for the tests of significance of the proposed moderated mediators.

To test moderation I examined two models. The parent model, in which all the parameters are freely estimated, and then the nested model in which all paths are constrained to be equal to one another across groups. The first model yielded the following model fit information: $\chi^2(2, N = 2796) = 15.115, p < 0.05, CFI = 0.993, TLI = 0.987, RMSEA = .026$ (C.I. 0.000 – 0.050), SRMR = 0.030, which suggests good model fit. As immigration status is a categorical variable, multiple group path analysis was conducted. This technique examines group differences to indicate moderated relationships. The nested model presented with the following model fit statistics: $\chi^2(2, N = 2796) = 47.044, p < 0.01, CFI = 0.961, TLI = 0.950, RMSEA = .050$ (C.I. 0.035 – 0.067), SRMR = 0.048, suggesting good model fit. I examined chi-square differences which suggested no significant decrease in model fit when comparing the nested model to the first model ($\chi^2\Delta = 31.93$). These results suggest that immigration status does not moderate the association between the direct paths previously described.

Although no moderation effects were found, mean construct differences were found across groups. Specifically, the observed variable discrimination proved to be unequal across all three groups in that citizen through naturalization and immigrant means are not significantly different ($M = 6.520$, and $M = 7.646$, respectively); while the discrimination construct mean for citizens was significant ($M = 15.105, p < 0.50$).

Dementia training as a moderated mediator – Hypothesis 2a:

Dementia training was treated as a continuous moderator of the original mediated path. The bootstrapping strategy was also applied in this analysis. This third model tested for the effects of dementia training as a moderator of the associations of race with respect and race with discrimination derived in Model 1. As noted earlier, missing data for the dementia training

moderator model required that I run this analysis on a subsample of the original sample ($N = 1,857$). Model 3 revealed the following model fit information: $\chi^2(2, N = 1,857) = 53.708, p < 0.001$, CFI = 0.920, TLI = 0.523, RMSEA = .118 (C.I. 0.092 – 0.146), SRMR = 0.034. This model shows inadequate fit, as both TLI and RMSEA do not show well-fitting values. Due to this questionable fit, caution should be taken when interpreting the results.

The moderator was examined by comparing direct associations of dementia training and race with respect, and discrimination to the association of the race x dementia training interaction with respect and discrimination. Centered interaction term was used based on the variables to examine the interaction effect. Race did not predict respect in Model 3 ($\beta = 0.047$). Dementia training did not significantly predict respect ($\beta = 0.131$), nor did the interaction between dementia training and race significantly predict respect ($\beta = 0.100$). Similarly, race did not predict discrimination in model 3 ($\beta = 0.064$). Dementia training did not significantly predict discrimination ($\beta = -0.093$), nor did the interaction between dementia training and race predict discrimination ($\beta = 0.160$). These results indicate that dementia training does not moderate the relationship between race and respect, nor that between race and discrimination.

CHAPTER 4

DISCUSSION

The aim of the current study was to determine direct and indirect associations of race, respect, discrimination, immigration status, and dementia training with CNA job satisfaction in long-term care. There were three primary goals associated with the study. The first was to examine the direct and indirect associations between race and job satisfaction via respect and discrimination. The second goal was to determine whether immigration status moderated the relationship of race with respect, race with discrimination, discrimination with job satisfaction, and respect with job satisfaction. The final goal was to determine if dementia training moderated the association of race with respect, as well as race with perceived discrimination.

Summary of Findings

Findings indicate that respect and discrimination both partially mediate the relationship between race and job satisfaction. These findings also indicate that immigration status and dementia training do not moderate the association between the previously listed direct paths.

Direct Associations

The final model established several significant direct associations that are important to understand before examining tests of specific hypotheses. Race significantly predicts job satisfaction amongst CNAs, in that job satisfaction is higher among NHWs than AAs Race also significantly predicts both respect and discrimination amongst CNAs, suggesting that AAs experience less perceived respect and more perceived discrimination than NHWs. Additionally, I

found that both respect and discrimination significantly predict job satisfaction such in that job satisfaction is higher when a CNA perceives higher levels of respect and lower levels of discrimination in the workplace, regardless of race.

Respect and Discrimination as Mediators of Race and Job Satisfaction

With regard to indirect effects, the results indicate that race partially predicts job satisfaction through respect. In general, NHWs report higher perceived respect than AAs. For both race groups, job satisfaction is higher when the CNA feels more respected, suggesting no differences between the patterns of associations as a function of race. These results do highlight the importance of respect for both NHWs and AAs as no significant group differences were found. Additionally, the results indicate that race partially predicts job satisfaction through discrimination. In general, AAs report higher perceived discrimination than NHWs. These results indicate that for both race groups, job satisfaction is higher when the CNA perceives less discrimination, suggesting no differences between the patterns of associations between both race groups. Furthermore, discrimination and respect are associated for both groups suggesting that regardless of race, perceived respect increases as perceived discrimination decreases.

Immigration Status and Dementia Training as Moderators

Surprisingly, immigration status does not moderate any of the direct paths that were significant in the original model. These include race with respect, race with discrimination, respect with job satisfaction, and discrimination with job satisfaction. There were differences found for perceived discrimination, suggesting that citizens perceive more discrimination than citizens through naturalization and immigrants. Additionally, dementia training did not moderate the direct path of race with respect, nor race with discrimination. Dementia training was found to

be an important component to job satisfaction. In general, NHWs actually report worse dementia training than AAs. African Americans did show a stronger association between better rated dementia training and decreased perceived discrimination. For both race groups, as dementia training is rated better perceived respect increases, and job satisfaction increases.

Clinical Implications

Respect as a Mediator

The observed mediation of race as a predictor of job satisfaction via respect supports previous research that has suggested a strong association between respect and job satisfaction (Bowers, Esmond, & Jaconson, 2003; (Sloane, Williams, & Zimmerman, 2010). Although no path differences were found for either racial groups, AAs did report lower perceived respect than NHWs in the workforce. Given racial differences in motivation, which suggest that AA employees are more motivated by task autonomy and ownership than NHWs (Friday, & Friday, 2002), as well as nursing care expectations (for example, AAs perceive fewer care expectations from residents and families than NHWs (Berdes, & Eckert, 2012), it is expected to see some group differences in terms of perceived respect. One could speculate possible differences in how each group defines respect. For example, AA CNAs may define respect as successful completion of autonomous tasks, while NHW CNAs may define respect in a more collaborative fashion.

We cannot dispute the evidence supporting the importance of respect for both NHWs and AAs. Certified nursing assistants have the arduous, yet vital responsibilities of assisting the elderly. Regardless of race group, CNAs have low-status employment, coupled with poor work conditions, challenging job tasks and minimal wage (Paraprofessional Healthcare Institute, 2011). It is understandable that CNAs need to feel respected in the workforce in order to

maintain job retention. This respect should come from supervisors, residents, and family members (Bishop, Squillace, Meagher, Anderson, & Wiener, 2009; Sloane, Williams, & Zimmerman, 2010). This study, coupled with preexisting literature, shows how important respect is for both racial groups, but in particular to AAs.

Studies among professional nurses (LPNs, RNs) have found that nurses who are empowered are more likely to feel respect in their workplace (Flesner & Rantz, 2004). Empowerment has also been studied in CNAs. Studies suggest that CNAs who have greater perceived empowerment are more likely to report better performance and attitudes and less intent to leave (Cready, Yeatts, Hosdin, & Potts, 2008). Empowered employees are more respected by other employees, and may offer insight into how to increase respect in long-term care.

Discrimination as a Mediator

The obtained mediating effect of discrimination for the relationship between race and job satisfaction supports previous research that has suggested that perceived discrimination is an extremely important factor in CNAs ratings of job satisfaction (Berdes, & Eckert, 2012; Ryosho, 2011). This path proved to be significant for both racial groups, in that as discrimination increases, job satisfaction decreases for NHWs and AAs. African Americans did report higher perceived discrimination in the workforce than NHWs.

Discrimination amongst CNAs in the workforce strongly influences job satisfaction and job retention. This study suggests that discrimination and job satisfaction have a strong relationship within both AAs and NHWs; however, it is particularly important for African Americans. Given the results, future research should examine the speculation that reducing levels

of perceived discrimination against CNAs could potentially lead to improvements in job satisfaction and job tenure.

Immigration Status as a Moderator

Immigrants make up a significant proportion of working CNAs. Sloane, Williams, and Zimmerman (2010) suggest that 13.9% of workers are immigrants. Additionally, literature has associated immigration status with respect (Sloane, Williams, & Zimmerman 2010), discrimination (Berdes, & Eckert, 2012), and job satisfaction (Friday, & Friday, 2002). Thus, immigration status was a key component of the model tested in this study. Unexpectedly, immigration status did not moderate the relationship between any of the four previously mentioned significant direct paths.

The associations between race and respect, race and discrimination, discrimination and job satisfaction, and respect and job satisfaction were significant across all three immigration groups (citizen, immigrant, and naturalized citizens). This suggests that immigration status does not moderate their relationships, and, in fact, that these significant associations hold true across all three groups. Our results did indicate that citizens report more discrimination than citizens through naturalization and immigrants. Previous literature has shown that immigrants are more likely to experience racism and discrimination in the workplace than their US-born coworkers (Bourgeault, Atanackovic, Rashid, & Parpia, 2010), so these results are somewhat surprising.

A possibility for this inconsistency is that previous literature has largely been qualitative in nature; the present study is quantitative. For example, Bourgeault, Atanackovic, Rashid, and Parpia (2010) conducted interviews with immigrant care workers in three Canadian provinces. Their qualitative results emphasized language barriers and cultural differences amongst

immigrant workers and residents' influences, and reducing adequate care for long-term care residents. Although informative, this study may not be generalizable across the majority of immigrant workers. This current study produced different results which do not reflect differences between immigrants. This may be due to the more generalizable and larger sample size in the dataset.

Another possibility for this inconsistency may be due to the small sample size of AA and NHW naturalized citizens. Given the low number of naturalized citizens in both of these groups, statistical power is low. This is likely to account for the lack of moderator effects. This lack of statistical power is something that should be examined in future research, and an increase in sample size for these two groups would be beneficial.

Dementia Training as a Moderator

Dementia training was an important component of the model as it has previously been shown to be correlated with lower discrimination, higher respect and higher job satisfaction; more positive attitudes about residents (Ramirez, Teresi, & Holmes, 2006) and, presumably, more positive attitudes about the workplace itself. Although dementia training did not moderate any paths, it was particularly significant for both race groups. Dementia training was correlated with respect, job satisfaction, and discrimination. In particular, dementia training was particularly important for AAs perceived discrimination.

We would expect that by engaging in dementia training, CNAs may understand resident communication and behavior better, which could in turn decrease perceived disrespect from the residents. As mentioned, Ramirez, Teresi, and Holmes (2006) found that when direct care workers participated in dementia training, they reported more positive attitudes with long-term

care residents. With improved communication and better interaction with residents, one can speculate that a CNA will report more perceived respect, at least directly from that resident. It was surprising that dementia training did not moderate the relationship between respect and race in the current analyses; however, it was expected that dementia training would be correlated with respect, discrimination, and job satisfaction.

Strengths and Limitations

There are several strengths associated with this study. This model examined the associations among race, respect, discrimination, job satisfaction, immigration status, and dementia training in one theoretical model. Previous studies had only investigated these constructs individually or two at a time (such as respect and job satisfaction). Job satisfaction in the workplace results from many factors, including perceived respect and discrimination (Wiener, Squillance, Anderson, & Khatutsky, 2009; Decker, Harris-Kojetin, & Bercovitz, 2009). By examining all of these constructs in a single model, we are better able to understand the variety of direct and indirect influences upon job satisfaction.

Another strength of this study is the representativeness of the sample, and how it compares to previous literature. For example, the sample is made up of 11% immigrants. This is comparable to previous literature that has explored immigration status, such as Sloane, Williams, and Zimmerman (2010), who had a comparable immigration sample of 13.9%. Similarly to previous research using the NNAS dataset (Squillace et. al, 2009; Rakovski, & Price-Glynn, 2010), there is an advantage to having access to such a large national sample. This present project is generalizable as participant responses indicated a wide range of responses and characteristics. Additionally, this study has a particularly strong representation of AAs in the

sample. Currently, approximately 38.7% of all CNAs are AA and 53.4% are NHW (U.S. Department of Health and Human Services, 2011). The present study represents a sample of 31.4% AAs and 61.3% NHWs. Although this study slightly over represents NHWs, it appropriately represents AAs in long-term care.

There are also several limitations associated with this study. First, this is a secondary data analysis. Thus, I was limited by what variables are available in the national survey. For example, I was limited in determining perceived discrimination with only one applicable question from the survey. Ideally, this construct could be composed of more indicators and survey questions to develop a more detailed discrimination scale.

Lastly, another limitation of this research is its cross-sectional nature. I was able to observe differences between groups based on responses from one point in time. It would be beneficial to collect longitudinal data that would permit observations of how these relationships change over time. For example, if respect fluctuates over a period of time, how would job satisfaction and intent to leave change amongst different racial groups? Or if there is an inconsistent amount of discrimination over a period of time, would there be any group changes in perceived discrimination amongst different immigration status groups? As mediation is a temporal analysis, without longitudinal data we cannot prove mediation. This study suggests that discrimination and respect mediate race and job satisfaction; however, this mediation would need to be confirmed by examining longitudinal data. Future research is needed to examine these constructs in a longitudinal fashion and to obtain proof of mediation.

Future Research

Future studies should examine these research questions in a primary data analysis. Doing so would allow for the examination of specific target variables. As mentioned earlier, by conducting a primary data analysis, I would be able to develop better questions for more cohesive scale constructions that would capture all constructs deemed important in previous literature. For example, as mentioned previously, one would also be able to capture more components of discrimination.

Additionally, future studies should focus on recommendations for practice. There is a lack of research that focuses on how supervisors and administrators should tailor their supervision order to ensure that all racial and immigration groups perceive strong levels of respect, in order to ensure their job maintenance. Future research could develop clinical interventions amongst CNAs in long-term care facilities to implement and examine supervision techniques that would boost CNA perceived respect.

Lastly, future studies should examine this research in a longitudinal manner. This would be particularly important to do in the context of dementia training, to permit examination of the effects of continuous dementia training and one-time baseline dementia training to compare differences of perceived discrimination and job satisfaction over time.

In sum, the present study confirms the important influence of race on respect and discrimination, and of respect and discrimination on job satisfaction. By looking at these relationships in a mediational model, I was able to expand pre-existing literature. The present findings also expand pre-existing dementia training literature, suggesting the importance of better rated dementia training to increased perceived respect, and job satisfaction, as well as decreased perceived discrimination. The present findings do differ from previous literature, in

that citizens, and not immigrants, actually perceive lower discrimination in the workforce. The overall patterns of these findings suggest that when dealing with CNA job satisfaction, one must take into consideration race, respect, and perceived discrimination. Immigration status and dementia training should continue to be examined in future research. By understanding these relationships and using them to guide modifications to the workforce environment, we can improve overall CNA job satisfaction, and decrease staff turnover rate. This would not only be beneficial to the staff, but also to the residents and to long-term care in its entirety.

Table 1

Sample Descriptives for Non-Hispanic Whites and African Americans

	Non-Hispanic Whites		African Americans	
	N	(%)	N	(%)
Marital Status				
Partner	846	56.3	330	38.9
No Partner	648	43.1	511	60.3
Education				
Less than High School	460	30.6	224	26.4
High School	674	44.8	411	48.5
Some College/Trade	318	21.1	170	20.0
College	38	2.5	29	3.4
Post college	5	.3	4	0.5
Income				
Less than 10,000	123	8.2	152	17.9
10,000-20,000	401	26.7	294	34.7
20,000-30,000	394	26.0	208	24.5
30,000-40,000	237	15.8	88	10.4
40,000 or higher	293	20.2	74	09.7
Immigration Status				
Citizen	1465	94.7	665	78.4
Non-Citizen	9	0.6	100	11.8
Citizen via Naturalization	21	1.4	78	9.2

Table 2

Descriptive Statistics for Primary Variables Non-Hispanic Whites and African Americans

Variable	N	Min	Max	Mean	SD	%
NHWs						
Age	1504	16	65	36.50	13.321	
Respect Scale	1493	3.0	10.0	4.10	1.170	
Dementia Training	978	1.0	4.0	1.33	0.471	
Job Satisfaction Scale	1496	1.0	4.0	1.79	0.716	
Discrimination	1496	1.0	4.0			3.5%
AAs						
Age	848	17	65	38.02	11.312	
Respect Scale	835	3.0	10.0	4.37	1.344	
Dementia Training	594	1.0	4.0	1.15	0.360	
Job Satisfaction Scale	837	1.0	4.0	1.85	0.718	
Discrimination	831	1.0	4.0			11.2%

Table 3*Correlations Among Covariates and Scales*

Variable	Dementia Training	Discrimination	Respect Scale	Job Satisfaction Scale	Age
Dementia Training	-	.026	.139***	.270***	-.019
Discrimination	.101*	-	.109***	.124***	.004
Respect	.157***	.167***	-	.467***	-.064*
Job Satisfaction	.113**	.215***	.462***	-	.008
Age	-.086*	-.004	-.165***	-.087*	-

Notes: Upper right – Non-Hispanic Whites; Lower left – African Americans.

* $p < .05$; ** $p < .01$; *** $p < .001$

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APPENDIX

A) Job Satisfaction Measure

1. On a scale of 1-4 (1 = strongly agree to 4 = strongly disagree)
 - a. My supervisor provides clear instructions when assigning work
 - b. My supervisor deals with the complaints and concerns of nursing assistants
 - c. My supervisor is open to new and different ideas, such as a new or better way of dealing with resident care
 - d. My supervisor is supportive of progress in my career, such as further training
 - e. My supervisor helps me with my job tasks when help is needed
 - f. My supervisor listens to me when I am worried about a residents care
 - g. My supervisor supports nursing assistants working in groups or teams with other health care workers, such as physical therapists, dieticians, RNs, LPNs, or other nurses...
 - h. My supervisor disciplines or removes other nursing assistants who do not do their job well or their share of the work
 - i. My supervisor tells me when I am doing a good job
2. Overall, how satisfied are you with your job? (1 = Extremely satisfied to 4 = Extremely dissatisfied)
3. Are you (1 = Extremely satisfied to 4 = Extremely dissatisfied) with the following aspects of your current job:
 - a. Workplace morale
 - b. Doing challenging work
 - c. The benefits

- d. The salary or wages
- e. Learning new skills

B) Respect Measure

1. I am appropriately respected or rewarded by my nursing facility for my work (1 = Strongly agree to 3 = Not at all)
2. To what degree do you feel residents respect you, as part of their health care team? (1 = A great deal to 3 = Not at all)
3. To what degree do you feel residents families respect you, as part of their health care team? (1 = A great deal to 3 = Not at all)
4. To what degree do you feel your supervisor respects you, as part of the health care team (1 = A great deal to 3 = Not at all)
5. How much do you think your supervisor values or appreciates the work that you do as a nursing assistant? (1 = Very much to 3 = Not at all)
6. How much do you think the organization {SAMPLED FACILITY} values or appreciates the work that you do as a nursing assistant? (1 = Very much to 3 = Not at all)

C) Discrimination Measure

1. On your current job, have you ever been discriminated against because of your race or ethnic origin? (1 = No, 2 = Yes)

D) Dementia Care

1. How well did initial NA training prepare you for dementia care (1 = Excellent to 5 = Not offered)
2. Have your continuing education classes covered dementia care (1 = Yes to 4 = No)