kin), 5) clinical (e.g., medical providers, clinician practices). In addition, gatekeeper domains are multilayered and serve distinct roles in both facilitating and hindering access to and enrollment of this under-researched vulnerable population. Analysis of our recruitment efforts contribute significant insights into how the dementia research community may engage the various domains of community gatekeepers, providing direction for current and future social science research.

## VIDEODINING IN OLDER ADULTS AGING IN PLACE: A FEASIBILITY AND ACCEPTABILITY STUDY

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Loneliness and a loss of commensality contribute to the decline in nutritional status observed in older adults. The use of video chatting while dining, i.e. "VideoDining", provides an opportunity for older adults to eat with another person virtually while dining at home. We tested the acceptability and feasibility of VideoDining in older adults receiving Meals on Wheels (MOW) and explored whether it changed meal intake. Participants were recruited from a rural county in NY and ate their MOW meal while VideoDining with a companion diner at a different location. To assess acceptability, we conducted semi-structured qualitative interviews with each participant and companion diners completed a written survey. The amount of the VideoDining meal consumed was compared to usual intake from three days of food records. 140 MOW clients were contacted,13 agreed to participate and 10 completed the VideoDining experience. Barriers to participation included being uncomfortable with the technology, lack of internet service and illness. Participants were 80% female, 100% white, and all lived alone. Average meal length was 39 minutes and 40% ate more than usual, 30% ate the same, and 30% ate less. Reasons for eating less included being nervous and eating when not their usual mealtime. All participants reported they would VideoDine again and companion diners rated the overall experience a 9.2 out of 10. Older adults are able to VideoDine with a new acquaintance and have a positive experience. Further study is needed to determine if VideoDining can increase dietary intake and decrease loneliness in older adults.

## MISSING VALUE IMPUTATION VIA GRAPH COMPLETION IN QUESTIONNAIRE SCORES FROM PERSONS WITH DEMENTIA

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Background: Questionnaires are widely used to evaluate cognitive functions, depression, and loneliness of persons with dementia (PWDs). Successful assessment and treatment of dementia hinge on effective analysis of PWDs' answers. However, many studies, especially pilot ones, are with small sample sizes. Further, most of them contain missing data as PWDs skip some study sessions due to their clinical conditions. Conventional imputation strategies are not well-suited as bias will be introduced because of insufficient samples. Method: A novel machine learning framework was developed based on harmonic analysis on graphs to robustly handle missing values. Participants were first embedded as nodes in the graph with edges derived by their

similarities based on demographic information, activities of daily living, etc. Then, questionnaire scores with missing values were regarded as a function on the nodes, and they were estimated based on spectral analysis of the graph with a smoothness constraint. The proposed approach was evaluated using data from our pilot study of dementia subjects (N=15) with 15% data missing. Result: A few complete variables (binary or ordinal) were available for all participants. For each variable, we randomly removed 5 scores to mimic missing values. With our approach, we could recover all missing values with 90% accuracy on average. We were also able to impute the actual missing values in the dataset within reasonable ranges. Conclusion: Our proposed approach imputes missing values with high accuracy despite the small sample size. The proposed approach will significantly boost statistical power of various small-scale studies with missing data.

## PHYSICAL THERAPY STUDENTS' ATTITUDES TOWARDS WORKING WITH PEOPLE WITH DEMENTIA AFTER VARIOUS LEARNING EXPERIENCES

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Working with people with dementia (PWD) can be challenging even for the most seasoned health professionals. Hence, teaching health professional students how to effectively work with this patient population is of importance. Two cohorts (n=43; aged 23-36 years) of Graduate Physical Therapy students participated in multi-modal learning experiences geared towards working with PWD within a geriatrics course. Modules included: 1) online lectures and readings followed by a team based learning activity, 2) 3 hours of 'positive approaches to care' along with a simulated experience of performing Activities of Daily living and Instrumental Activities of Daily Living of PWD, and 3) one-on-one interactions during both lunch and dinnertime with at least three PWD residing in a state veteran's home. The Dementia Attitudes Scale (DAS) was used to measure attitudes of students at baseline and following each activity. Repeated measures analysis of variance revealed a significant increase in positive attitudes of students working with PWD across each activity (98.2 +/- 10.5 baseline) with the most positive attitudes noted after interactions with PWD in a state veteran's home (111.2 +/- 15.0), [F(2.0, 83.8) = 19.4, p <.01, partial eta $^2 = .32$ ]. However, this difference was not significant when controlling for students who had previous experience interacting with PWD. In conclusion, Doctor of Physical Therapy students' attitudes towards PWD improve with different learning experiences, with the greatest improvements after one on one interactions with PWD if the student did not have prior experience interacting with PWD.

## SOCIAL RELATIONS AND FRAILTY TRAJECTORY IN LATER ADULTHOOD: EVIDENCE FROM HEALTH AND RETIREMENT STUDY

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