

RESEARCH ARTICLE

# Educational Approaches to Upholding Dignity in Older Adult Care: A Comparative Analysis of Embarrassment between Generation Z Students and Elderly Residents

Keiko TSUJI<sup>1</sup>, Naomi IWATA<sup>2</sup>, Mayumi UCHIDA<sup>3</sup>, Asumi NOMURA<sup>1</sup>, Kanae NODA<sup>1</sup>, Yuiko ARAKI<sup>1</sup>, Miwa SHIMOJO<sup>4</sup>, Hiromi KODAMA<sup>1</sup>

<sup>1</sup>School of Nursing, Faculty of Nursing, Reiwa Health Sciences University, 2-1-12 Wajirogaoka, Higashi-Ku, Fukuoka-city, Fukuoka, 811-0213, Japan

<sup>2</sup>Department of Education, Faculty of Education and Cultural Studies, Hokusho University, 23 Bunkyo-dai, Ebetsu-city, Hokkaido, 069-8511, Japan

<sup>3</sup>Department of Nursing, Faculty of Occupational Health Sciences, University of Occupational and Environmental Health, 1-1 Iseigaoka, Yahatanishi-Ku, Kitakyusyu-city, Fukuoka, 807-8555, Japan

<sup>4</sup>Faculty of Fukuoka Medical Technology, Department of Nursing, Teikyo University, 6-22 Misaki-machi, Omuta-city, Fukuoka, 836-8505, Japan.

Received: 25 September 2024 Accepted: 10 October 2024 Published: 17 October 2024

**Corresponding Author:** Keiko Tsuji, School of Nursing, Faculty of Nursing, Reiwa Health Sciences University, 2-1-12 Wajirogaoka, Higashi-Ku, Fukuoka-city, Fukuoka, 811-0213, Japan.

## Abstract

To teach Generation Z students (born between the mid-1990s and early 2010s) the importance of preserving elderly dignity, we surveyed older adult residents in senior welfare facilities and fourth-year nursing students regarding their feelings of embarrassment when assisting with activities of daily living. The results revealed that students experienced significantly higher levels of embarrassment, particularly with bathing and excretion, whether they were providing monitoring or full assistance. They also reported greater discomfort when performing activities of daily living (ADLs) with monitoring assistance in group settings.

We hypothesize that the students were more attuned to the perspectives of those receiving care, contributing to their heightened embarrassment. In contrast, older adult residents reported lower levels of shame, likely due to their acceptance of assistance as a result of declining physical abilities. This resignation reduced their discomfort with being seen and helped them accept the necessity of assistance. To provide dignified care for older adults, understanding the process of accepting assistance and the social context of each generation is crucial. The study highlights the need for faculty to consider their students' perspectives to effectively teach Generation Z.

**Keywords:** Older Adults, Nursing Students, Dignity, Teaching Methods, Shame.

## 1. Introduction

According to the White Paper on older adults,<sup>1)</sup> the population aged 75 and over will peak in 2055. With the projected increase in older adult hospitalizations, it can be inferred that nursing students will more frequently be assigned to care for older adults during their clinical practice. The 2022 National Survey

of Living Conditions,<sup>2)</sup> revealed that 20.1% of households consisted of only parents and unmarried children, while 7.1% consisted of three generations. This suggests that many students have had limited interaction with older adults in their personal lives. Consequently, understanding and caring for older adults may be a challenging learning experience for them.

**Citation:** Keiko TSUJI, Naomi IWATA, Mayumi UCHIDA, *et al.* Educational Approaches to Upholding Dignity in Older Adult Care: A Comparative Analysis of Embarrassment between Generation Z Students and Elderly Residents. Open Access Journal of Nursing, 2024;7(2): 40-47.

©The Author(s) 2024. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

In 2015, the population over 65 entered the “baby-boom generation.”<sup>1)</sup> Ushikubo<sup>3)</sup> categorized many generations between this baby-boom generation and Generation Z (students born in the mid-1990s to early 2010s), such as the New Generation, Baby Boomer Juniors, and Generation Yutori. Understanding these generational differences is important for providing care that preserves the dignity of older adult patients. Moreover, it is crucial to incorporate this understanding into basic nursing education so that students can better recognize the tendencies of older adults and provide individualized care that respects their unique lives.

One characteristic often attributed to Generation Z students is their strong motivation to contribute to society compared to other generations<sup>4)</sup>. Sai et al.<sup>5)</sup> have noted that this desire to contribute is high across different faculties, grades, and genders. Furthermore, “wanting to help others” consistently ranks as the top reason for choosing nursing as a field of study<sup>6)-8)</sup>. However, a survey by the Japan Research Institute found that only 24.0%<sup>9)</sup> of university students actively participate in social contribution activities, such as school trips or experiential learning, highlighting a gap between student’s intentions and their actual involvement. Therefore, it is essential to develop educational methods that address this gap, particularly in on-site training, to teach students how to provide dignified care to older adults.

This study aims to clarify the degree of shame experienced by older adults and students during assistance with activities of daily living (ADLs) to explore effective teaching methods for educating Generation Z students on preserving the dignity of older adults.

## 2. Methods

### 2.1 Data Collection Period

This cross-sectional descriptive study was conducted from December 2021 to September 2022.

### 2.2 The Study Participants

Participants were residents from 283 facilities listed on the LIFULL Care website in Prefectures A and B, including nursing homes and residential care homes. Of these, 59 residents from 22 facilities agreed to participate. Additionally, the questionnaire was distributed to 489 nursing students from two of the 10 medical universities in Prefectures A and B, identified through the Manabi University Entrance page, who agreed to participate. The study ultimately included

45 fourth-year students who had completed basic nursing education.

### 2.3 Questionnaire Assessment

Participants were asked to assess their degree of embarrassment during the ADLs: bathing, excretion, eating, and walking. These activities were assessed in three scenarios: (1) performed alone under supervision (monitoring assistance for an individual), (2) performed under supervision in group activities (monitoring assistance in a group), and (3) performed with full assistance. Responses were rated on a scale of 1 to 10, with 10 indicating the highest level of embarrassment.

### 2.4 Statistical Analysis

Descriptive statistics, including means and standard deviations, were calculated for embarrassment scores associated with each ADL (Figures 1-3) in each assistance (monitoring assistance for an individual, monitoring assistance in a group, and full assistance). To compare the levels of embarrassment between residents and nursing students at the same ADL (Figures 1-3), Wilcoxon rank sum test was performed. The significance levels were set at  $p < 0.05$  and  $p < 0.01$ . Additionally, Wilcoxon signed rank test was conducted to assess differences in embarrassment scores between different ADLs in each assistance. This test was applied to residents and students, respectively (Tables 2-7).

### 2.5 Ethical Considerations

This study received approval from the Ethics Committee of the University of Occupational and Environmental Health Sciences (21-0023). The heads of the participating facilities were informed in writing that the participating was voluntary and that no disadvantages would result from declining. Participant’s privacy was secured, and they were informed that the study results would be published. Consent to participate was obtained by having residents and nursing students complete the questionnaire.

## 3. Results

### 3.1 Study Participants

This study included 41 residents (response rate: 69.5%) and 142 nursing students (response rate: 29.0%), of whom 45 were fourth-year students, accounting for 31.7% of the student respondents. Valid responses were obtained from 36 residents (valid response rate: 87.8%) and all 45 nursing students (valid response rate: 100%). An overview of valid respondents is presented in Table 1.

**Table 1.** Demographics of study participants.

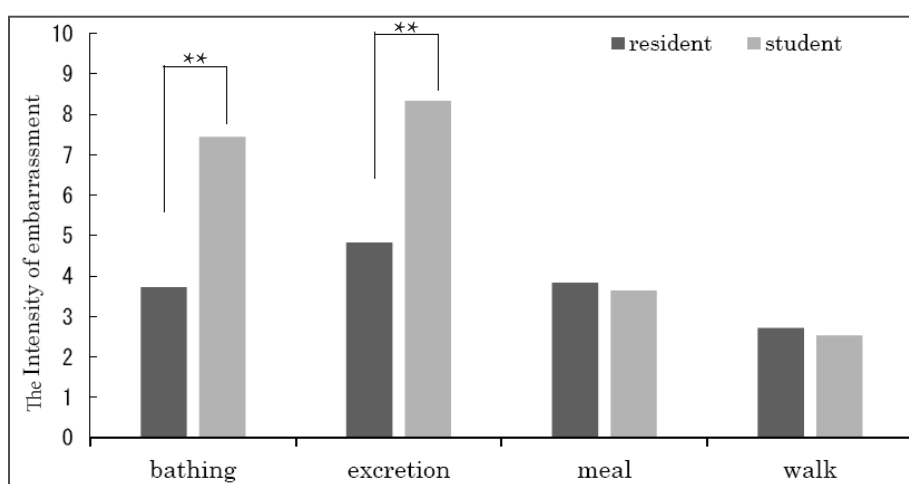
|                                |                | Nursing student | Resident   |
|--------------------------------|----------------|-----------------|------------|
| Number of respondents          | Male (number)  | 0               | 10         |
|                                | Woman (number) | 45              | 26         |
| Average age (SD) (years)       |                | 21 (0.64)       | 87.4 (8.9) |
| Average length of stay (years) |                | —               | 4          |

**3.2 Monitoring Assistance for Individual Activities**

Residents reported excretion as the most embarrassing activity (4.8 points), followed by bathing (3.7 points). For students, excretion was also the most embarrassing (8.3 points), followed by bathing (7.4 points). The order of embarrassment for both groups was excretion, bathing, meals, and walking. Students

felt significantly more embarrassed than residents about bathing and excretion. (Figure 1)

Among both of residents and students, excretion caused more embarrassment than bathing, meals, and walking, with meals causing significantly more embarrassment than walking (Tables 2 and 3).



**Figure 1.** Comparison of the resident and student of embarrassment for monitoring one-on-one assistance in a facility. \*\*  $p < 0.01$

**Table 2.** Comparison of embarrassment levels between ADLs during individual monitoring assistance in residents

| ADLs      | Mean (SD)   | Bathing | Excretion | Meal   | Walk   |
|-----------|-------------|---------|-----------|--------|--------|
| Bathing   | 3.72 (2.85) | —       | 0.02*     | 0.64   | 0.02*  |
| Excretion | 4.83 (3.25) |         | —         | 0.00** | 0.00** |
| Meal      | 3.44 (2.82) |         |           | —      | 0.04*  |
| Walk      | 2.72 (2.46) |         |           |        | —      |

\*\*  $p < 0.01$ , \*  $p < 0.05$

**Table 3.** Comparison of embarrassment levels between ADLs during individual monitoring assistance in students

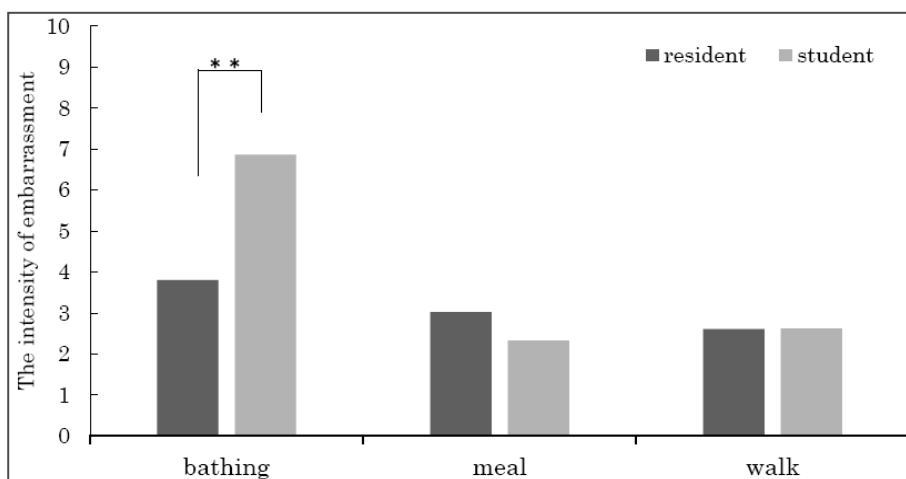
| ADLs      | Mean (SD)   | Bathing | Excretion | Meal   | Walk   |
|-----------|-------------|---------|-----------|--------|--------|
| Bathing   | 7.44 (2.02) | —       | 0.00**    | 0.00** | 0.00** |
| Excretion | 8.33 (1.79) |         | —         | 0.00** | 0.00** |
| Meal      | 3.31 (1.86) |         |           | —      | 0.00** |
| Walk      | 2.53 (1.42) |         |           |        | —      |

\*\*  $p < 0.01$ , \*  $p < 0.05$

**3.3 Monitoring Assistance for Group Activities**

For group activities, residents felt the most embarrassment during bathing (3.8 points), followed by meals (3.0 points). Students also reported bathing as the most embarrassing (6.9 points), followed by walking (2.6 points). When comparing the two

groups, students were significantly more embarrassed about bathing than residents (Figure 2). Among both of residents and students, bathing was significantly more embarrassing than both meals and walking (Tables 4 and 5).



**Figure 2.** Comparison of the resident and student of embarrassment for monitoring assistance in a group in a facility. \*\*  $p < 0.01$

**Table 4.** Comparison of embarrassment levels between ADLs during group monitoring assistance in residents

| ADLs    | Mean (SD)   | Bathing | Meal  | Walk   |
|---------|-------------|---------|-------|--------|
| Bathing | 3.81 (2.84) | —       | 0.02* | 0.03** |
| Meal    | 3.03 (2.83) |         | —     | 0.16   |
| Walk    | 2.61 (2.48) |         |       | —      |

\*\*  $p < .01$ , \*  $p < .05$

**Table 5.** Comparison of embarrassment levels between ADLs during group monitoring assistance in students

| ADLs    | Mean (SD)   | Bathing | Meal   | Walk   |
|---------|-------------|---------|--------|--------|
| Bathing | 6.87 (2.13) | —       | 0.00** | 0.00** |
| Meal    | 2.33 (1.37) |         | —      | 0.47   |
| Walk    | 2.62 (2.03) |         |        | —      |

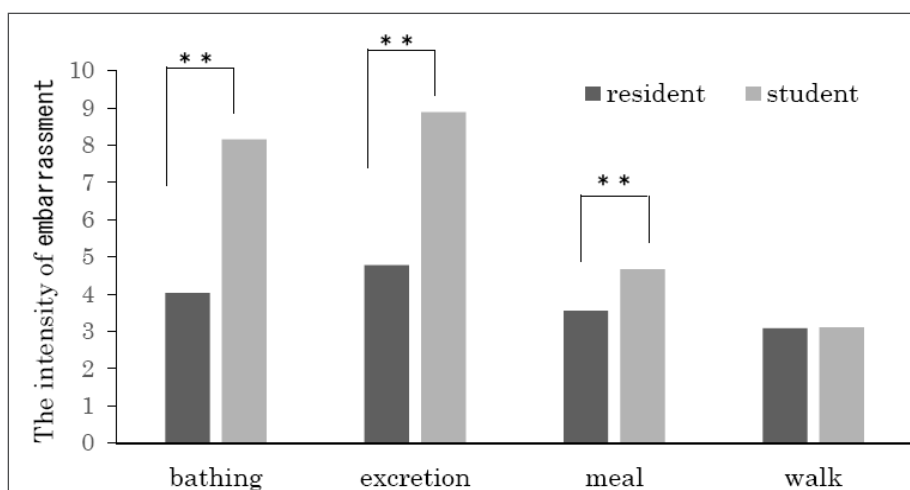
\*\*  $p < .01$ , \*  $p < .05$

### 3.4 Full Assistance in the Facility

When residents received full assistance with ADLs, excretion was the most embarrassing activity (4.8 points), followed by bathing (4.0 points). For students, excretion was also the most embarrassing (8.9 points), followed by bathing (8.2 points). Students experienced significantly higher levels of embarrassment than residents regarding bathing, excretion, and meals.

However, no significant difference was observed for walking between the two groups. (Figure 3)

Among residents, excretion was significantly more embarrassing than meals and walking (Table 6). For students, excretion caused significantly more embarrassment than bathing, meals, or walking, with meals being more embarrassing than walking (Table7).



**Figure 3.** Comparison of the resident and student of embarrassment for full assistance in a facility. \*\*  $p < 0.01$

**Table 6.** Comparison of embarrassment levels between ADLs during full assistance in residents

| ADLs      | Mean (SD)   | Bathing | Excretion | Meal   | Walk   |
|-----------|-------------|---------|-----------|--------|--------|
| Bathing   | 4.03 (2.79) | —       | 0.08      | 0.32   | 0.06   |
| Excretion | 4.78 (3.33) |         | —         | 0.00** | 0.00** |
| Meal      | 3.56 (2.84) |         |           | —      | 0.15   |
| Walk      | 3.08 (2.93) |         |           |        | —      |

\*\* p &lt; 0.01, \* p &lt; 0.05

**Table 7.** Comparison of embarrassment levels between ADLs during full assistance in students

| ADLs      | Mean (SD)   | Bathing | Excretion | Meal   | Walk   |
|-----------|-------------|---------|-----------|--------|--------|
| Bathing   | 8.16 (1.73) | —       | 0.00**    | 0.00** | 0.00** |
| Excretion | 8.89 (1.60) |         | —         | 0.00** | 0.00** |
| Meal      | 4.67 (1.84) |         |           | —      | 0.00** |
| Walk      | 3.11(1.78)  |         |           |        | —      |

\*\* p &lt; 0.01, \* p &lt; 0.05

## 4. Discussion

This study was conducted to explore the embarrassment experienced by elderly residents in care facilities and fourth-year nursing students when providing assistance with ADLs. Understanding these emotional responses is crucial, as they can significantly impact the quality of care provided and the dignity maintained during such interactions.

### 4.1 Monitoring Assistance for Individual Activities

In this study, students reported higher levels of embarrassment compared to residents. Sakuta<sup>10</sup> and Kuwamura<sup>11</sup> observed that the degree of embarrassment is influenced by who is watching. Sasaki et al.<sup>12</sup> categorized relationships into three psychological distance groups and observed that individuals feel the most shame when observed by acquaintances of the same sex (middle group), whose faces and names are known but with whom they have not interacted, rather than by close friends (near group) or strangers (far group). Furthermore, Kuwamura<sup>11</sup> clarified the concept of empathic shame, where one feels embarrassment situations, observed by someone psychologically closer. In our previous study<sup>13</sup>, nurses reported higher embarrassment during bed bathing in a hospital ward than first- and second-year college students and patients. We hypothesize that in this study, fourth-year students, having experienced more lectures and clinical training, were more attuned to the feelings of those receiving care, contributing to their higher levels of embarrassment.

Conversely, residents reported lower levels of shame. In a survey by Sakaguchi<sup>14</sup>, some residents expressed a desire for doctors and nurses to be mindful of touching their bodies during medical examinations, while others expressed resignation, stating, “it can’t

be helped.” Sugawara<sup>15</sup> also reported that even if older adults appear unbothered by assistance with tasks like defecation or bathing, they may be adopting a “shameless” demeanor to maintain appearances. These findings suggest that without directly asking residents about their feelings of shame, it may be difficult to ascertain their true emotions.

### 4.2. Embarrassment During Group ADLs

Residents often participate in group activities at facilities, such as communal bathing, dining in halls, and group walks. In contrast, students showed an aversion to group activities. Goto<sup>16</sup> reported that for Generation Z, the ability to perform various tasks on smartphones and carry data with them fosters greater “individuality.” Additionally, students are taught that meals have physiological, psychological, and social significance<sup>17</sup>. However, a survey by the Ministry of Agriculture, Forestry, and Fisheries<sup>18</sup> reported that 25.5% of men and 6.4% of women in their 20s living with family do not eat dinner with them, and 57.4% of men and 43.6% of women do not eat breakfast with them. Kon<sup>19</sup> also observed that when dining out, Generation Z prefers going to family restaurants with just one or two companions. This suggests that students may feel embarrassed about eating in a group.

Regarding embarrassment during group meals, older adult residents have learned traditional Japanese dining customs, such as how to properly hold chopsticks and rice bowls. For older adults, being observed struggling with these actions may highlight their declining physical abilities, contributing to feelings of shame. A survey by Fukuoka et al.<sup>20</sup> found that chopstick users tend to maintain a higher level of independence, with difficulties attributed to issues like tooth loss and impaired swallowing or chewing.



Additionally, Okuda<sup>21)</sup> reported that correct use of chopsticks and table etiquette, such as not resting elbows on the table, have long been considered aesthetic standards. As residents lose the ability to uphold these practices, it is likely that their attitude toward meals has become one of embarrassment.

### 4.3. Embarrassment Under Full Assistance

When receiving full assistance, students reported significantly higher embarrassment than residents regarding bathing, excretion, and meals. This heightened embarrassment among students may be attributed to their ability to empathize with the residents' situation, imagining themselves in the same position.

For residents, facility life imposes a structured routine that can diminish their autonomy and individuality. Onishi<sup>22)</sup> argued that while life in a facility may be regular and healthy, the institutional management of residents' lives often deprives them of a truly human existence. Moreover, the facility functions more as a "workplace" for staff than a "home" for residents. Consequently, the residents' initial shame about receiving assistance may turn into resignation as they transition from living independently to needing care.

Residents did not differ in the embarrassment they felt about bathing and excretion, but excretion was significantly more embarrassing than meals or walking. Because excrement is dirty and smelly, receiving help with it is extremely distressing. Additionally, since most people become independent in excretion by age six, older adults find it painful to rely on others for an activity they have done alone for nearly 80 years. Understanding the psychology of residents who need full assistance is not about right or wrong. Goto<sup>16)</sup> reported that Generation Z, living in a digital world, struggles with ambiguity, and education is shifting from "teaching" to "learning." Educators must adapt to students' levels of understanding.

### 4.4. Considering Embarrassment Through Intergenerational Integration

When assisting with bathing, students felt significantly more embarrassed than residents in all three scenarios: individual assistance, group assistance, and full assistance, and in excretion, students felt significantly more in two scenarios: individual and full assistances. This suggests that students perceive these tasks as personally affecting them. The program shows consideration by acknowledging the embarrassment of those receiving assistance. Kiriaki et al.<sup>23)</sup> noted that during internships in

geriatric nursing, students learned the importance of respecting and maintaining the self-esteem the older adults. Tanaka et al.<sup>24)</sup> observed a strong correlation between nursing students' knowledge of older adults and their attitudes toward them. However, Sano et al.<sup>25)</sup> argued that students still in training show no correlation between knowledge about older adults and ageism (prejudice and discrimination against older adults). These findings suggest that the high level of embarrassment felt by fourth-year students in this study may be related to their stage of completing basic nursing education.

A 2022 survey by the Japan Council of Nursing Universities<sup>26)</sup> revealed that 20.9% of faculty members at private universities, 10.7% at national universities, and 13.0% at public universities are aged 60 or older. At private universities, over half of the faculty members are over 50. As we develop lesson plans, we must consider how feelings of shame differ across generations and cultures. However, it is crucial for instructors to understand the unique characteristics of Generation Z when teaching nursing students how to provide care that maintains patients' dignity.

### 4.5 Limitations of Research and Prospects

Notably, the study's findings are limited to residents of specific care facilities and nursing students in selected regions of Prefectures A and B in Japan. Additionally, the timing of the survey coincided with the COVID-19 pandemic, which resulted in a lower response rate and may limit the generalizability of the results. Future research should aim to include a more diverse sample across various regions and consider longitudinal approaches to better understand the evolving dynamics of embarrassment in elderly care settings.

## 5. Conclusion

This study explored the feelings of embarrassment experienced by older adult residents in care facilities and fourth-year nursing students when providing assistance with ADLs. Among residents, excretion was identified as the most embarrassing task, followed by bathing. For students, excretion also ranked highest in embarrassment during one-on-one assistance, followed by bathing, meals, and walking. In group settings, residents rated bathing as the most embarrassing activity, with meals in second place, while students rated bathing the highest at 6.9 points, followed by walking at 2.6 points. Comparatively, students felt significantly more embarrassed about bathing than residents when assisting in a group.

During full assistance, excretion was again the most embarrassing task for both groups, with residents scoring 4.8 points and bathing 4.0, while students showed a similar pattern but with higher levels of embarrassment for both activities. These findings highlight the need for educators to better understand students' perspectives to effectively teach Generation Z nursing students how to respect the dignity of older individuals.

### Acknowledgments

We extend our sincere gratitude to the residents of older adult care facilities in Prefectures A and B, as well as to the nursing students who participated in this study. This research was partially supported by the Grant-in-Aid for Scientific Research (C) General (subject number: 20K10679), Japan Society for the Promotion of Science, for the fiscal years 2020–2024.

### 6. References

1. Cabinet Office (2024), *White Paper on the Aging Society* (Full Version) (PDF version) Status of the Aging Society, (4) (accessed at 2024.8.24.) (in Japanese) [https://www8.cao.go.jp/kourei/whitepaper/w-2024/zenbun/pdf/1s1s\\_01.pdf](https://www8.cao.go.jp/kourei/whitepaper/w-2024/zenbun/pdf/1s1s_01.pdf)
2. Ministry of Health, Labor and Welfare (2022) 2022 Overview of the Basic Survey on National Living Conditions:2023 (accessed at 2024.8.24.) (in Japanese) <https://www.mhlw.go.jp/toukei/saikin/hw/k-tyosa/k-tyosa22/dl/14.pdf>
3. Ushikubo, M. (2022) Future possibilities of living products: From the perspective of youth and generational marketing (accessed at 2024.8.24.) (in Japanese) [https://www.meti.go.jp/shingikai/mono\\_info\\_service/seikatsu\\_seihin/pdf/004\\_04\\_00.pdf](https://www.meti.go.jp/shingikai/mono_info_service/seikatsu_seihin/pdf/004_04_00.pdf)
4. Ministry of Economy, Trade and Industry, *Reiwa* (3rd Edition), White Paper on Trade (Full Edition) (accessed at 2024.8.24.) (in Japanese) [https://www.meti.go.jp/report/tshuhaku2021/pdf/2021\\_zentai.pdf](https://www.meti.go.jp/report/tshuhaku2021/pdf/2021_zentai.pdf)
5. Sai, H., Orito, Y., Okamoto, T., Okamoto, T., Soga, N., & Tachibana, Y. (2024) Undergraduates' willingness to contribute to society based on WTP of SDGs, *Abstracts of the National Research Presentation Conference of the Japan Society for Management Information*, 202311: 273-276. (in Japanese)
6. Masumoto, T. & Tanabe, M. (2012) Relationship between motive for entrance and self-educational ability of nursing students, *Bulletin of Kawasaki College of Allied Health Professions*, 32: 7-13. (in Japanese)
7. Otaka, E., Miura, M., & Sato, S. (2001) A study of the degree of satisfaction with the college and entrance expectations: A survey of 2nd year student nurses, *Journal of the Japanese Red Cross Junior College of Akita*, 6: 1-7. (in Japanese)
8. Endo, K. & Sekine, R. (2015) Relationship between nursing students' intrinsic academic motivation and the changes in the inclination to learn according to the style of the class, *Bulletin of Dokkyo Medical University School of Nursing*, 8: 1-12. (in Japanese)
9. Japan Research Institute (2023) 2022 youth awareness survey ~ survey on the impact of awareness of sustainability and financial education on thoughts about careers, marriage, etc. (accessed at 2024.8.24.) (in Japanese) <https://www.jri.co.jp/company/release/2023/0810/>
10. Sakuda, K. (1967) *Rethinking the Culture of Shame*, Chikumashobo, Tokyo, Japan. (in Japanese)
11. Kuwamura, Y. (2009) Empathic embarrassment and psychological distance, *Japanese Journal of Personality*, 17: 311-313. (in Japanese)
12. Sasaki, J., Sugawara, K., & Tanno, Y. (2005) Why is the diverse U letter relationship between embarrassment and psychological distance observed, *Psychological Research*, 76: 445-452. (in Japanese with English summary)
13. Hagiwara, T., Shimojo, M., Kodama, H., Sasaki, Y., Iwata, N., & Tsuji, K. (2017) Nurses' Estimates of Patients' Embarrassment Part 1: Comparison of Nursing Care Situations, The 37th Japan Academy of Nursing Science Academic Conference Lectures:295-296. (in Japanese)
14. Sakaguchi, T. (1987) A study of shame: Adolescent women's experiences of shame in medical settings, *Technique*, 33: 78-84. (in Japanese)
15. Sugawara, K. (1998) *Why do people feel shame* Science Company, 98-99, Tokyo, Japan. (in Japanese)
16. Goto, T. (2023) A bird's-eye view of generation Z, *Nursing Perspectives*, 48: 10-14. (in Japanese)
17. Okaniwa, Y. (2018) *Nursing in vision vol.1 basic nursing techniques*, Medic media, p106, Tokyo, Japan (in Japanese)
18. Ministry of Agriculture (2024) Forestry and fisheries, survey report on food education awareness (accessed at 2024.8.24.) (in Japanese) <https://www.maff.go.jp/j/syokuiku/ishiki/r06/index.html>
19. Kon, T. (2013) *Family Restaurants: The Modern History of Dining Out*, Kobunsha Shinsho, Tokyo, Japan (in Japanese)
20. Fukuoka, A., Nakamura, K., & Sato, R. (2011) The relationship between the use of chopsticks and independence in daily life in elderly care facilities, *Journal of the Japanese Dietetic Association*, 54: 877-881. (in Japanese)

21. Okuda, K. (1987) Consciousness and changes in dining etiquette among today's young people: From a survey of Konan Women's University students, *Konan Women's University Research Bulletin*, 23: 183-199. (in Japanese)
22. Onishi, S. (2011) Living in an "institution" – understanding the essence of "institutional life" through the experiences of residents, *Momoyama Gakuin University Student Papers Student Papers*, 26: 27-46. (in Japanese)
23. Kiriaki, M. & Tsujimura, F. (2021) Learning about the health of the elderly and support for independence of living functions in the elderly care facilities-from report analysis by text mining-, *Hachinohe Gakuin University Bulletin*, 63: 31-39. (in Japanese)
24. Tanaka, Y., Nakahira, M., Matsuura, M., & Mimura, H. (2007) A review of the literature dealing with attitudes, knowledge and images held regarding elderly people: Implications for nursing education, *Bulletin of Sankyo Gakuin Junior College*, 36: 34-42. (in Japanese)
25. Sano, N., Ringohara, T., & Akaeda, H. (2010) Relationship between ageism and nursing students' understanding and knowledge of elderly people obtained through nursing study: Learning effectiveness of elderly nursing science practical I, *Annual Bulletin Department of Nursing* 5: 7-16 (in Japanese)
26. Japan Nursing University Council (2024) Annual comparison of surveys on nursing universities – 2018 to 2022 (accessed at 2024.8.24.) (in Japanese) <https://www.janpu.or.jp/wp/wp-content/uploads/2024/06/2018-2022DB5yearComparison.pdf>