

Relationship between cultural capital and social capital with personal hygiene habits among elderly men

ABSTRACT

Background: The decline in function that occurs in the elderly population is considered a characteristic of their aging process. This certainly affects their behavior and ability to maintain personal hygiene. The study aimed to determine the correlation between cultural capital and social capital with personal hygiene among the elderly.

Methods: The research was an observational study using a cross-sectional design. The study sample consisted of elderly men in West Aceh with a sample size of 150. Assessment was conducted on three variables, including cultural capital, social capital (as independent variables), and personal hygiene (as the dependent variable). Data was collected through interviews using the questionnaire as the research instrument.

Results: The results indicated that the average age of the respondents was 70.90 years (SD: 7.97), with a higher proportion having completed upper secondary education (45.3%) and a majority still being employed (72%). Correlation and simple linear regression analyzes revealed that cultural capital was significantly associated with personal hygiene ($p = 0.001$), showing a moderate strength of the relationship ($r = 0.339$) and a positive correlation. Additionally, social capital was significantly related to personal hygiene ($p = 0.046$) with a weak strength of the relationship ($r = 0.163$) and a positive correlation.

Conclusion: The study demonstrated that cultural capital had a stronger relationship with the personal hygiene of elderly men compared to social capital, although both played significant roles in personal hygiene. Further studies are still highly necessary to support these findings, both with the same design in different locations and with different designs, such as longitudinal and experimental studies.

Keywords: Aged, Cultural capital, Healthy behavior, Social capital

1. Introduction

It is acknowledged that old age is often associated with a range of functional declines, impacting the behavior and abilities of the elderly to adopt healthy lifestyles, such as self-care. One form of self-care is maintaining personal hygiene or engaging in physical care routines. These habits include bathing, maintaining oral hygiene, washing hair, trimming nails, and others. Rahayu et al, in their study report, mentioned that 17.7% of the elderly exhibited poor behavior regarding personal hygiene [1]. Specifically, regarding tooth brushing behavior, the results of the 2018 Basic Health Research (Riskesdas) showed that the highest proportion of tooth brushing (98%) was in the age groups of 15-24 years and 25-34 years. In age groups above that, there is a continuous decrease in the proportion. A drastic decline in tooth brushing behavior is evident among the age groups of 55-64 years (91.2%) and 65 years and above (71.0%) [2]. This illustrates that as age increases, the likelihood of engaging in tooth brushing behavior decreases.

Elderly individuals with poor personal hygiene behavior are at a higher risk of experiencing health problems, especially if such behavior has become a habit since a younger age. This is reinforced by the World Health Organization's statement, which explains that 60% of factors related to an individual's health and quality of life correlate with behavior or lifestyle [3]. A specific study examining oral hygiene in the elderly has proven that this variable is significantly associated with body mass index [4]. The Centers for Disease Control and

30 Prevention (CDC) explains that dirt and bacteria accumulate more on longer nails,
31 contributing to the spread of infection [5]. Additionally, frequently cleaned hair can lead to an
32 increased risk of infection and unpleasant odors [6].

33 A number of studies on personal hygiene and related factors have been conducted. A study
34 by Unger et al revealed that essential materials (such as soap and water), educational
35 level, economic conditions, and comfort are associated with personal hygiene behaviors,
36 particularly in terms of hand and face washing [7]. Ramos-Morcillo et al demonstrated a
37 significant correlation between family and the personal hygiene of children [8]. Miko et al
38 explained from their study results that the perception of socially accepted behavior becomes
39 a motivation for the habits of university students [9]. In a study focused on the elderly
40 population, conducted by Kusumawati, a significant relationship was found between the
41 elderly living with family and personal hygiene compared to those living in nursing homes
42 [10].

43 Many studies on personal hygiene involve child populations [8, 11, 12] and adolescent girls
44 [13, 14, 15]. Meanwhile, studies specifically highlighting the hygiene behaviors of the elderly
45 population are still limited, including studies on the correlation between cultural capital and
46 social capital with personal hygiene among the elderly. This has resulted in difficulties in
47 finding references related to their personal hygiene. Therefore, this study aims to determine
48 the relationship between cultural capital and social capital with personal hygiene among
49 elderly men.

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51 **2. Methods**

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53 **2.1. Study design**

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55 This study employed an observational approach with a cross-sectional design. The
56 research sample consisted of elderly men aged 60 years or older, with a total sample size
57 of 150. The study was conducted in the West Aceh Regency, Aceh Province, Indonesia.

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59 **2.2. Measurement**

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61 There are three variables assessed in this study, consisting of two independent variables
62 (cultural capital and social capital) and one dependent variable (personal hygiene).
63 Interviews were conducted for data collection using the questionnaire. The questionnaire
64 was structured in the form of statements. Five (5) statements were used to assess cultural
65 capital, and 11 statements were used to measure social capital. Personal hygiene was
66 measured using four statements. Before the questionnaire was administered to respondents,
67 validity and reliability tests were conducted, involving 30 participants outside the study
68 subjects. The Cronbach's alpha values were 0.738 for cultural capital, 0.887 for social
69 capital, and 0.813 for personal hygiene.

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71 **2.3. Statistical analysis**

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73 To determine the correlation between cultural capital and social capital with personal
74 hygiene, the author conducted statistical analysis. The statistical analyzes used were
75 correlation tests and simple linear regression. The tool used to facilitate the statistical
76 analysis was SPSS version 21.

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78 **3. Results**

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80 Table 1: Demographic characteristics, cultural capital, social capital, and personal hygiene
habits of respondents.

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Respondent characteristics (n=150)	f	Mean/%	SD
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Age		70.90	7.967
Education			
Elementary school	53	35.3	
Junior high school	68	45.3	
Senior High School	12	8.00	
College	17	11.3	
Work			
Doesn't work	42	28.0	
Work	108	72.0	
Cultural capital		2.947	.379
Social capital		2.939	.341
Personal hygiene		2.767	.448

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82 Referring to the analysis results of 150 respondents (Table 1) reveals that the average age
83 of the study participants was 70.90 years (SD: 7.97). In terms of education, the majority of
84 respondents had completed junior high school (45.3%), with a smaller percentage having
85 completed senior high school (8.0%). Regarding employment status, a significant portion of
86 respondents (72%) are still employed. The average scores of respondents' answers about
87 cultural capital, social capital, and personal hygiene were 2.95 (SD: 0.38), 2.94 (SD: 0.34),
88 and 2.77 (SD: 0.45), respectively.
89

90 Table 2: Results of correlation and simple linear regression analysis between cultural capital
91 and social capital with personal hygiene among elderly men.
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Variable	R	R ²	Line equation	P value
Cultural Capital	0.339	0.115	ph = 1.59 + 0.40*cc	<0.001
Social Capital	0.163	0.027	ph = 2.14 + 0.22*sc	0.046
Information: ph = Personal hygiene; cc = cultural capital; sc = social capital				

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94 The results of correlation and simple linear regression analysis (Table 2) indicated that the
95 relationship between cultural capital and personal hygiene showed a moderate correlation
96 ($r = 0.339$) and a positive correlation, indicating that higher cultural capital in elderly men
97 was associated with better personal hygiene. The coefficient of determination (R square)
98 value was 0.115, meaning that the regression line equation obtained could explain 11.5%
99 of the variation in self-care habits. Statistical test results showed a significant relationship
100 between cultural capital and personal hygiene in elderly men ($p = 0.001$).
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102 Furthermore, the relationship between social capital and personal hygiene in elderly men
103 showed a weak correlation ($r = 0.163$) and a positive correlation, meaning that higher social
104 capital in elderly men was associated with better personal hygiene. The coefficient of
105 determination (R square) value was 0.027, indicating that the regression line equation
106 obtained could explain 2.7% of the variation in self-care habits.
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108 4. Discussion

109 Personal hygiene is a crucial aspect of life, aimed at maintaining health and reducing
110 ongoing health issues. It is stated that the foundation for achieving overall health and well-
111 being is through personal hygiene [16]. Al-Rifaa'i and colleagues define personal hygiene as
112 the practice of maintaining cleanliness, improving, and preserving body health [17]. This
113 practice is employed to enhance health, prevent disease, maintain well-being, and manage
114 illnesses and disabilities, with or without the support of healthcare providers. The decline in

115 the immune function of the elderly population makes them a vulnerable group susceptible to
116 preventable infectious diseases through proper personal hygiene. However, personal
117 hygiene is not a standalone variable; it is interconnected with various other factors. Our
118 study specifically emphasizes the relationship between cultural capital and social capital with
119 personal hygiene, as both variables are considered influential in shaping people's habits,
120 including personal hygiene habits.

121 Cultural capital, in general, is associated with knowledge of the dominant conceptual and
122 normative aspects written within a culture [18]. The concept of cultural capital was
123 developed by Bourdieu, who defined it as 'forms of knowledge, skills, education, and
124 advantages that a person has, which give them a higher status in society [19]. This
125 understanding implies that the cultural resources possessed by an individual serve as the
126 primary constructs of their paradigm when thinking, making decisions, and acting in certain
127 matters. These resources include values, behavioral norms, and knowledge, mostly
128 acquired through social learning [20]. Abel further adds that social learning processes occur
129 under various conditions across all social classes, group statuses, or environments [20].

130 Our study results indicate that cultural capital significantly contributes to the personal
131 hygiene of the elderly, showing a moderate-strength relationship. This demonstrates that
132 cultural capital serves as a determinant of elderly behavior, particularly in personal hygiene.
133 Elderly individuals with higher cultural capital are more likely to adopt good personal hygiene
134 habits, thereby supporting their health. Conversely, those with lower cultural capital tend to
135 have lower personal hygiene habits. This conclusion is based on statistical test results
136 showing a positive correlation between these two variables. Positive habits, such as
137 personal hygiene, can be formed when individuals possess strong cultural capital.

138 Cultural capital, viewed through three aspects, includes institutionalized cultural capital,
139 incorporated cultural capital, and objectified cultural capital. Institutionalized cultural capital
140 is a resource in the form of recognition acquired from an institution. This resource is typically
141 in the form of qualifications obtained by an individual through educational degrees [21].
142 Additionally, incorporated cultural capital encompasses all the knowledge and skills
143 individuals possess in their daily activities or practices, acquired through 'culture' [20].
144 Meanwhile, objectified cultural capital refers to physical objects, such as various
145 possessions owned by individuals. Abel reveals that objectified cultural capital can include
146 books, paintings, machinery, technical tools, etc [20]. Our study focuses on two aspects
147 (incorporated and objectified cultural capital). Incorporated cultural capital can be seen as a
148 precondition for most individual actions and a key component in society's capacity for
149 agency in the field of health [22].

150 In addition to cultural capital, the study results indicate that social capital also has a
151 significant relationship with the personal hygiene of the elderly. Although the strength of the
152 relationship between these two variables is weak, social capital needs attention in fostering
153 elderly individuals with good personal hygiene habits. Elderly men with high social capital
154 are more likely to have better personal hygiene habits, while those with low social capital
155 may exhibit poor personal hygiene habits. This finding is supported by Story's statement,
156 which explains that social capital has been shown to be related to health behavior [23] and
157 personal hygiene is undoubtedly a part of healthy behavior. Furthermore, a study mentioned
158 that lifestyle plays a significant role in mediating the relationship between social capital and
159 health [24]. In the elderly, age-related disorders can be delayed, and chronic diseases can
160 be prevented through a lifestyle that enhances health [25].

161 Simply put, social capital can be defined as the community's ability to form associations
162 (relationships) with each other. This capital then becomes a crucial force, not only for
163 economic strength but also in every other aspect of social existence [26]. Social capital can
164 be seen as the 'glue' that connects individuals within a society. The relationships in question
165 are related to how people treat someone in line with their treatment of others. This is
166 because of social obligations, reciprocity, social solidarity, and community [27]. Researchers
167 divide social capital into two categories: structural and cognitive. Social capital related to

168 subjective attitudes or people's perceptions of the level of trust between individuals, sharing,
169 and reciprocity falls under cognitive, while that related to the level of tightness in social
170 networks or patterns of civil engagement is considered social structural capital [28].
171 This study measures the two forms of social capital (cognitive and structural) among elderly
172 men. Cognitive aspects assess their attitudes or perceptions regarding their trust in the
173 community, village officials, and healthcare services. This section also evaluates their
174 perceptions of community concern for vulnerable individuals, such as the poor, the elderly,
175 and those with disabilities. As for the structural aspect, we examine the level of closeness in
176 relationships between the elderly and their family members, community, and village officials
177 in their place of residence.
178 Using the measurement tools we employed and the results of statistical tests, it illustrates
179 that elderly men who perceive a high level of trust in the community, village officials, and
180 healthcare services, along with a high level of community concern, good village officials, and
181 strong relationships with village officials, the community, and family members, are likely to
182 have good personal hygiene habits. On the other hand, personal hygiene habits among the
183 elderly may deteriorate if they perceive low levels of trust in the community, village officials,
184 and healthcare services, low community concern, poor village officials, and weak
185 relationships with village officials, the community, and family members.
186 This study suggests practitioners to pay attention to cultural capital and social capital in
187 shaping the behavior of the elderly, especially regarding personal hygiene. The primary
188 focus is on cultural capital because it can explain 11.6% of personal hygiene. In the elderly
189 population, cultural capital can be provided through religious activities and health education
190 in the community to strengthen incorporated cultural capital. Additionally, objectified cultural
191 capital can be enhanced through the ownership of information media (such as radio,
192 television, and the internet) and technical items (such as soap, toothbrushes, and shampoo).
193 Apart from being part of objectified cultural capital, information media can also enhance the
194 knowledge of the elderly, while technical items can be used for personal hygiene.
195 Furthermore, referring to the concept of cultural capital proposed by experts, cultural capital
196 is indeed an effort that can be undertaken long before entering the elderly period. These
197 resources can be developed within the household, educational settings, and the community
198 (such as peer environments). Individuals who adopt a healthy lifestyle, including good
199 personal hygiene habits, before entering old age may reduce the risk of various health
200 disorders during the elderly period. Additionally, maintaining good personal hygiene habits
201 during old age, especially in good health conditions, can further reduce the risk of health
202 issues. For the elderly dealing with health problems and practicing personal hygiene, there is
203 a greater opportunity to mitigate and eliminate these issues. Conversely, elderly individuals
204 with health problems but poor personal hygiene habits may face a higher likelihood of
205 experiencing more severe health issues. This could potentially increase the risk of mortality.

206 207 **5. Conclusion**

208 This study concluded that cultural capital and social capital were significantly related to the
209 personal hygiene of the elderly. Cultural capital exhibited a moderate level of relationship
210 strength with the personal hygiene of the elderly, while social capital demonstrated a weak
211 level of relationship strength. Further studies, particularly on cultural capital and health
212 behaviors (including personal hygiene), are still highly needed, involving different design
213 approaches.

214 215 **Consent**

216 As per international standards or university standards, Participants' written consent has
217 been collected and preserved by the author(s).

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Conflict of Interest:All authors have reached an agreement that there is nothing to be debated, and there are no conflicts of interest in this writing

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