|  |
| --- |
|  |
| Book Name: | [**Disease and Health: Research Developments**](https://www.bookpi.org/bookstore/product/disease-and-health-research-developments-vol-1/) |
| Manuscript Number: | **Ms\_BPR\_4281** |
| Title of the Manuscript:  | **Intrinsic capacity of the Elderly: Connotation, Measurement, Status, and Influencing Factors** |
| Type of the Article | **Book Chapter** |

|  |
| --- |
| PART 1: Comments |
|  | Reviewer’s comment | Author’s Feedback *(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)* |
| **Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.** | The article provides a comprehensive overview of the concept of **Intrinsic Capacity (IC)** in elderly populations, focusing on its role in "healthy aging." It emphasizes how IC — which includes a person's cognitive, mobility, vitality, psychological, and sensory abilities — plays a crucial role in maintaining overall health and quality of life in aging individuals. The key findings highlight that IC can be used as a predictive tool for various health outcomes, such as fall risks, disability, and even mortality rates, making it an essential aspect of elderly care.The article also critiques the current state of research, noting that IC measurement tools, like the WHO’s **ICOPE** screening tool, are valuable for identifying declines in IC, but they may be limited in their scope. The importance of multidimensional and longitudinal studies to develop more accurate, practical, and comprehensive measures for IC is emphasized. |  |
| **Is the title of the article suitable?****(If not please suggest an alternative title)** | The title "Intrinsic Capacity of the Elderly: Connotation, Measurement, Status, and Influencing Factors" is generally suitable, as it accurately reflects the key themes of the article. However, it could be made slightly more concise and focused to better capture the essence of the research. Here’s an alternative title suggestion:**"Intrinsic Capacity in Elderly Care: Concepts, Measurement, and Key Influencing Factors"**This revised title emphasizes the core elements (concepts, measurement, and influencing factors) and frames the research within the context of elderly care. It maintains clarity while being more direct. |  |
| Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here. | The abstract is comprehensive and covers the key points well, such as the objective, methods, results, and conclusions. However, a few adjustments could enhance clarity and make it more concise. Here are some suggestions:1. **Opening sentence revision**: The first sentence could be slightly shortened for better readability and focus. The idea of "healthy aging" can be directly linked to intrinsic capacity for more clarity.

**Suggestion**: "In the context of healthy aging, researching and evaluating the intrinsic capacities of elderly people can help identify factors contributing to their decline, and implementing optimization measures can reduce adverse health effects, promoting healthy aging."1. **Objective clarity**: The objective sentence is well stated but can be made clearer by emphasizing the need for actionable insights.

**Suggestion**: "The objective of this study is to understand the current research on the intrinsic capacities of the elderly and to provide a foundation for personalized care services."1. **Method section**: The methods section is clear, but the phrasing could be adjusted for smoother flow.

**Suggestion**: "We conducted a literature search for cross-sectional or cohort studies on the connotation, measurement, incidence, and influencing factors of the intrinsic capacities of elderly people, published in both Chinese and English over the past decade. We used six databases: PubMed, Embase, Web of Science, Cochrane Library, China Biomedical Literature Database, and CNKI."1. **Results**: The results sentence is a bit long and could be clearer by breaking down the key findings.

**Suggestion**: "A total of 59 papers were included in the analysis. Research on intrinsic capacities in the elderly is still in the early stages, focusing on theoretical models. Key research topics include the definition of intrinsic capacities, theoretical frameworks, dimensions, and evaluation system development."1. **Conclusion**: The conclusion is strong but could benefit from a more explicit call to action for future research.

**Suggestion**: "Examining the health status of the elderly from the perspective of intrinsic capacities aligns with WHO’s goals for healthy aging. It also lays the groundwork for a health security system in geriatric medicine that better addresses the needs of the elderly. Future research should focus on developing standardized evaluation tools and conducting multi-center, large-sample longitudinal studies and randomized controlled trials."**Revised Abstract**: "In the context of healthy aging, researching and evaluating the intrinsic capacities of elderly people can help identify factors contributing to their decline, and implementing optimization measures can reduce adverse health effects, promoting healthy aging. The objective of this study is to understand the current research on the intrinsic capacities of the elderly and to provide a foundation for personalized care services. We conducted a literature search for cross-sectional or cohort studies on the connotation, measurement, incidence, and influencing factors of the intrinsic capacities of elderly people, published in both Chinese and English over the past decade. We used six databases: PubMed, Embase, Web of Science, Cochrane Library, China Biomedical Literature Database, and CNKI. A total of 59 papers were included in the analysis. Research on intrinsic capacities in the elderly is still in the early stages, focusing on theoretical models. Key research topics include the definition of intrinsic capacities, theoretical frameworks, dimensions, and evaluation system development. Examining the health status of the elderly from the perspective of intrinsic capacities aligns with WHO’s goals for healthy aging. It also lays the groundwork for a health security system in geriatric medicine that better addresses the needs of the elderly. Future research should focus on developing standardized evaluation tools and conducting multi-center, large-sample longitudinal studies and randomized controlled trials." |  |
| **Is the manuscript scientifically, correct? Please write here.**  | The manuscript is scientifically sound but can be improved in clarity and structure. Below are some suggestions for improving the manuscript's flow and accuracy:**1. Introduction:*** **Population aging** **definition:** You’ve correctly defined population aging as when 7% or more of a country's population is aged 65 and above. However, this definition can be expanded to include the statistical thresholds proposed by organizations like the UN, which define the stages of aging in terms of percentage breakdowns (e.g., aged society at 14% or more of people aged 65+).
* **Context and Clarity:** The transition between the challenge of aging society and the WHO's definition of "healthy aging" could be smoother. Consider more explicitly connecting how "healthy aging" addresses the challenges posed by population aging.

**2. Proposal of ‘Intrinsic Capacity’:*** **Clear Definitions:** When introducing intrinsic capacity (IC), ensure the definition is not only clear but also links it to broader health metrics like "functional ability" or "health span."
* **Conceptual Framework:** The explanation of physical fitness could be enhanced by more explicitly connecting how physical fitness (e.g., WHO's definitions) overlaps and differs from IC, particularly in relation to psychological and social components.
* **Scientific Accuracy:** It is accurate to mention that a decrease in IC can lead to increased risks for falls, hospitalization, and mortality. However, citing specific studies would strengthen this section. Referencing studies that indicate specific statistical risk increases for various diseases, like cardiovascular issues or diabetes, would help frame the narrative around IC's predictive power.

**3. Measurement of ‘Intrinsic Capacities’:*** **WHO’s ICOPE Tool:** The description of the ICOPE screening tool is generally correct. You could elaborate more on its limitations, such as the fact that it is not a comprehensive diagnostic tool but more of a risk screening tool. A stronger emphasis on the tool's predictive validity and comparison with other instruments could improve this section.
* **Screening Tool Scores:** The explanation of scoring methods for ICOPE could be made clearer by simplifying the description of scoring systems used in different studies. For example, a clearer breakdown of how 0 or 1 points are assigned in ICOPE (e.g., is 0 for 'no impairment' and 1 for 'impaired function'?) would enhance clarity.
* **Composite and Combination Scales:** Your mention of combining multiple evaluation tools (like Geriatric Depression Scale) is accurate. However, it would benefit from further elaboration on how combining these tools might lead to more robust assessments. Also, mention of other combined scoring systems in other studies, if available, would strengthen your argument.

**Overall:*** **Clarity and Consistency:** While the manuscript is scientifically correct, it could benefit from enhanced clarity in certain parts, especially when discussing measurements and methodologies. A clearer breakdown of each assessment method would help readers understand the progression of assessments from screening to in-depth evaluation.
* **Language Precision:** The phrase “intrinsic capacity provides a result that is directly meaningful to people’s lives” could be improved for better precision. Perhaps: “Intrinsic capacity provides a more direct, actionable measure of an elderly person’s health and functional status than traditional disease-focused assessments.”
 |  |
| **Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.****-** | Yes, the references appear to be comprehensive and relevant to the topic of intrinsic capacity and aging. They cover various studies and reports on the concept, measurement, and impacts of intrinsic capacity, as well as its association with health outcomes in elderly |  |
| Is the language/English quality of the article suitable for scholarly communications? | The article's language and structure are generally suitable for scholarly communication, but there are several areas where improvements can be made to increase clarity, conciseness, and flow. Below are a few suggestions for enhancing the scholarly tone and improving readability:**1. Introduction Section:*** The first sentence could be clearer and more concise. Consider revising it to: "Population aging occurs when the proportion of people aged 65 and above in a country exceeds 7% of the total population."
* In some places, sentences are quite long and could be split into smaller, more digestible statements. For example: "With the decline in fertility rates and the increase in average life expectancy, global population aging is deepening."

**2. Consistency in Terminology:*** "Intrinsic capacity (IC)" is introduced early, but it could benefit from a consistent description throughout the paper. In some sections, it is referred to as "intrinsic capacities," so standardizing the term will help avoid confusion.
* Consider clarifying the definition of IC early in the article and reiterating its importance. For example, the phrase "The so-called 'Intrinsic capacity (IC)' refers to the total amount of physical and mental energy..." could be refined to, "Intrinsic Capacity (IC) refers to the total physical and mental energy an individual can draw upon at any given time."

**3. Flow and Transition:*** The transitions between paragraphs could be smoother. For instance, when shifting from the discussion on the importance of IC to the research on its decline, consider using transition sentences that guide the reader through the argument.
* Example transition: "Given its relevance to overall health, research into IC has expanded significantly, revealing that declines in IC are linked to a range of negative health outcomes."

**4. Clarity and Precision:*** In some cases, sentences are overly complex or contain redundant phrasing. For example, the sentence "The reduction of IC will increase the incidence rate and hospitalization rate of various diseases of the elderly" could be simplified to: "Declines in IC are associated with higher incidence and hospitalization rates for various diseases among the elderly."
* In some instances, there are repetitions or vague phrases, such as "IC is also a risk factor for the decline of Activities of Daily Living (ADL) and Instrumental Activities of Daily Living (IADL)." Clarify by rephrasing, "IC decline is a significant risk factor for impairments in ADLs and IADLs."

**5. Figures and Data:*** When referencing specific data or studies, ensure the citation is seamlessly integrated into the sentence. For instance, rather than "For every unit increase in mobility and vitality in IC, the mortality rate decreases by 12% and 4%, respectively [7].", consider: "Research indicates that for every unit increase in mobility and vitality within IC, mortality rates decrease by 12% and 4%, respectively [7]."
* This will help the data feel more connected to the argument being made.

**6. References and Citation Style:*** Be consistent with citation style. In some places, references are cited using numbers in brackets, while in others, they are not. For example: "WHO's proposed screening tool for the elderly, ICOPE, is a prime example of this method of measurement [1,2]."
* Consider using the same citation format throughout the paper to maintain consistency and improve readability.

**7. Conclusion:*** The article seems to be focused on providing a detailed overview of IC and its implications for elderly care. Consider adding a more explicit conclusion or a summary section that highlights the key points, areas for future research, and the practical applications of the findings.
 |  |
| Optional/General comments | The paper presents a comprehensive and insightful review of the concept of "Intrinsic Capacity" (IC) and its significance in healthy aging, addressing its physiological, psychological, and social dimensions. Below are some optional/general comments that could enhance the paper:1. **Clarity of Definitions**:
	* The introduction provides a good overview, but it could benefit from clearer definitions of key terms early on, such as "healthy aging," "intrinsic capacity," and "functional trajectory." This would ensure that the reader has a clear understanding of the foundational concepts before diving deeper into the content.
2. **Connection to Global Frameworks**:
	* The paper references the WHO's framework on healthy aging and intrinsic capacity. Expanding on how this framework compares or contrasts with other international aging frameworks might provide a broader perspective and strengthen the argument for global research on IC. For example, you could compare it with the aging strategies of other organizations like the United Nations or national health policies.
3. **Critical Evaluation of Measurement Tools**:
	* While the paper discusses the importance of assessing IC, it could benefit from a more critical evaluation of the limitations of existing measurement tools like ICOPE. A deeper exploration of their accuracy, reliability, and application in various contexts (e.g., resource-limited settings or different cultural contexts) could be valuable. Additionally, a discussion on the challenges faced by clinicians and researchers in applying these tools universally could provide insight into the practical obstacles of IC assessment.
4. **Research Gaps and Future Directions**:
	* The paper does well to highlight the need for further research on IC. It might be beneficial to more explicitly state what areas of future research are most urgently needed, such as longitudinal studies to track the decline of IC over time or studies focused on the intersectionality of age and other factors like socioeconomic status or gender.
5. **Impact on Policy and Interventions**:
	* It would be useful to further elaborate on the potential impact of IC measurement on policy and intervention design. For example, how can these findings be translated into better healthcare policies for the elderly? Highlighting specific examples where IC assessment has led to successful interventions or improved healthcare outcomes could strengthen the paper’s practical implications.
6. **Engaging with Psychological Aspects**:
	* The psychological aspects of IC (e.g., mood, mental health, and cognitive function) are mentioned briefly but could be expanded further. Given the growing recognition of the importance of mental health in aging populations, an in-depth exploration of how psychological factors contribute to IC and healthy aging could offer valuable insights.
7. **Data on Health Outcomes**:
	* Including more concrete data and real-world examples of how IC is used to predict specific health outcomes (e.g., morbidity, mortality, hospitalization rates) would further underscore the value of IC as a predictive tool.
8. **Interdisciplinary Collaboration**:
	* Emphasizing the importance of interdisciplinary collaboration between geriatricians, psychologists, social workers, and other healthcare professionals could add depth to the discussion of how IC is assessed and managed in practice. This could also tie back to the WHO’s holistic approach to healthy aging.

Overall, the paper presents a strong foundation and offers significant contributions to the discussion of intrinsic capacity and aging. Expanding on some of the above points could further enhance the paper’s clarity, depth, and potential impact on the field.**Reasoning**:* **Content**: The manuscript presents a thorough exploration of the topic, covering key areas, offering strong research foundations, and integrating various relevant perspectives.
* **Structure**: Well-organized and easy to follow.
* **Clarity**: Most sections are clear, but there may be occasional moments where further elaboration or clarification is needed for specific concepts.
* **Relevance**: The paper tackles important and timely issues with a good balance of theoretical and practical insights.
* **Improvements Needed**: Revisions to strengthen some sections or provide additional context could be helpful, but the core of the work is solid.

The manuscript is very close to being fully acceptable but could benefit from improvements. |  |

|  |
| --- |
| **PART 2:**  |
|  | **Reviewer’s comment** | **Author’s comment** *(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)* |
| **Are there ethical issues in this manuscript?**  | *(If yes, Kindly please write down the ethical issues here in details)* |  |

|  |
| --- |
| **Reviewer Details:** |
| Name: | **Suela Ndoja** |
| Department, University & Country | **Albania** |