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DEVELOPMENT VALIDATION OF PROPENSITY TO SEEK GENETIC COUNSELING SCALE (PSGCS)

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ABSTRACT
This study aimed to develop and validate the Propensity to Seek Genetic Counseling (PSGC) scale, a tool designed to measure the likelihood of individuals, particularly relatives of cancer patients, engaging with genetic counseling services. Existing tools have failed to account for critical psycho-clinical factors such as emotional readiness and motivational barriers. To address this, the PSGC scale was developed through a comprehensive process including literature review, expert consultations, and pilot testing among 51 relatives of cancer patients at Obafemi Awolowo University Teaching Hospital Complex. The initial 22-item scale was refined to 16 items based on item-total correlation analysis. The final scale demonstrated high internal consistency with a Cronbach's alpha of 0.92 indicating strong reliability. The PSGC scale incorporates factors such as knowledge, perceived benefits and barriers, and emotional readiness, making it a valuable tool for identifying individuals at risk of genetic conditions who may not seek counseling due to psychological or motivational challenges. This validated scale provides a reliable measure for healthcare professionals and researchers, offering potential for broader application in improving genetic counseling uptake and health outcomes.

Key Words: Genetic Counselling, Cancer, Psycho-clinical factors

INTRODUCTION
Genetic counseling (GC) has become an essential part of healthcare for individuals at risk of hereditary conditions, particularly those with a family history of cancer. As a preventive measure, GC helps individuals understand their genetic risks and make informed decisions about their health, including options for early detection and preventive care (Hampel et al., 2020). It plays a critical role in the management of hereditary diseases by providing information about genetic risks, testing options, and psychological support. Despite its importance, there is significant variability in the rates at which individuals seek these services.

Many high-risk individuals do not seek genetic counseling due to barriers such as lack of awareness, emotional distress, fear of test results, and logistical or financial constraints (Joseph et al., 2022; Cragun et al., 2020). These obstacles contribute to the under-utilization of GC services, particularly among relatives of cancer patients, who stand to benefit most from early intervention. A clear understanding of the factors influencing the propensity to seek genetic counseling is essential for improving service utilization. However, a measure of this is gap is almost not available, especially in Nigeria.

There is growing recognition of the need for a scale that assesses propensity, taking into account psycho-clinical factors, emotional readiness, and motivational influences. Studies show that interventions like motivational interviewing can enhance the likelihood of individuals seeking genetic counseling by addressing underlying behavioral and emotional barriers (Dean et al., 2022; Kaphingst et al., 2021). However, no validated tool comprehensively measures these factors. The

development of a Propensity to Seek Genetic Counseling Scale is therefore necessary to fill this gap and assist healthcare professionals in improving the uptake of genetic counseling services.

There is growing recognition of the need for a scale that assesses propensity, considering psycho-clinical factors, emotional readiness, and motivational influences. Studies have shown that interventions like motivational interviewing can enhance the likelihood of individuals seeking genetic counseling by addressing underlying behavioral and emotional barriers (Dean et al., 2022; Kaphingst et al., 2021). However, no validated tool exists that comprehensively measures these factors. The development of a Propensity to Seek Genetic Counseling Scale is therefore necessary to fill this gap and provide healthcare professionals with a tool to identify individuals who are likely to benefit from genetic counseling but are not currently seeking it.

This study aims to develop and validate a scale that measures the propensity to seek genetic counseling among relatives of cancer patients. By addressing the limitations of existing tools and incorporating psycho-clinical and motivational factors, this new scale will enhance the understanding of genetic counseling uptake and support targeted interventions to increase engagement in GC services.

Several factors are believed to potentially influence the propensity to seek genetic counseling, with psychological, knowledge-based, and demographic considerations all playing a role. Psychological factors, such as perceived risk of developing a genetic condition, may drive individuals toward genetic counseling. For instance, Lerman et al. (2020) suggest that individuals who perceive a higher risk for breast and ovarian cancer are more inclined to consider counseling. However, psychological responses like anxiety and fear could also lead to ambivalence. McCarthy et al. (2021) note that anxiety may encourage some individuals to seek information and support, while deterring others due to fear of receiving a genetic diagnosis.

Knowledge and awareness are also believed to affect individuals' decisions to pursue genetic counseling. Studies, such as those by Harris and Hodge (2020), indicate a potential correlation between individuals' awareness of genetic counseling services and their likelihood of utilizing them. Similarly, Pérez-Jurado and Huertas (2020) point to the possible benefits of public awareness campaigns in shaping attitudes toward genetic counseling. These insights suggest that higher levels of knowledge could positively affect an individual's decision to seek counseling.

Demographic variables, including factors like age, gender, and cultural background, are thought to play a role in determining whether individuals seek genetic counseling. Lau et al. (2022) observed that younger people and women might be more inclined to pursue such services, while Kessler and Cottler (2022) raise the idea that cultural beliefs and perceptions might shape how genetic counseling is viewed, particularly in some communities.

Despite the recognized benefits of genetic counseling, various barriers may inhibit access. Biesecker and Peters (2021) highlight stigma and misconceptions about genetic disorders as potential obstacles, while Cummings and Harris (2021) discuss practical barriers, such as geographic limitations and financial concerns that may further restrict access. These challenges suggest a need for a better understanding of the specific factors that may prevent individuals from seeking genetic counseling.

In light of these considerations, the literature suggests a need for a standardized scale to measure the propensity to seek genetic counseling. Teguh et al. (2023) emphasize that a tool enabling consistent assessment across different populations could be valuable in identifying trends and obstacles. Such a scale would not only enhance understanding but also inform interventions aimed at improving the utilization of genetic counseling services.

Statement of Problem

Genetic counselling (GC) for high-risk persons, especially those with a family history of cancer, is becoming more widely available and important. However, many high-risk individuals do not use these services. Several research has found that psychological factors such as fear of test result, emotional discomfort, financial constraints, and limited awareness hinder genetic counselling (Hampel et al., 2020; Joseph et al., 2022). These barriers often hinder people, especially cancer patients' families, who are at higher risk and benefit most from early genetic screening and counselling, from obtaining these vital treatments.
Adejumo's (2018) Perceived Need for Genetic Counselling measure has examined awareness and perceived need for genetic counselling, but it has not examined the predisposition to seek genetic counselling. Recognition of need and motivational, emotional, and behavioural aspects affect whether an individual seeks genetic counselling (Reeves et al., 2021). Perceived need alone does not account for psycho-clinical elements including emotional preparedness, motivational drive, and the ability to overcome hurdles that determine genetic counselling involvement (Dean et al., 2022; Kaphingst, 2021).

A comprehensive method to quantify genetic counselling propensity is lacking in clinical practice and research. Without such a tool, it is difficult to identify genetic counselling candidates who are psychologically or motivationally hindered. This emphasizes the need for a new measure that incorporates psycho-clinical characteristics, emotional preparedness, and behavioural motives to predict genetic counselling use. Such a scale would allow healthcare practitioners to create more focused genetic counselling uptake and utilization initiatives.

METHODOLOGY

The study protocol was approved by the Research and Ethics Committees of the Faculty of the Social Sciences, University of Ibadan, UI/SSHREC/2022/0033, and the Obafemi Awolowo University Teaching Hospital Complex (OAUTHC), ERC/2024/02/11, where data collection was conducted. The development of the Propensity to Seek Genetic Counseling (PSGC) scale was a component of a larger research project investigating the impact of psychological factors (knowledge of genetic counseling, cancer-specific distress, and risk perception) and clinical factors (family history and genetic mutation risk) on the propensity to seek genetic counseling. The study also aimed to establish the efficacy of motivational interviewing among relatives of cancer patients.
The scale development process followed standard psychometric procedures. First, the construct of interest—propensity to seek genetic counseling—was clearly defined as an individual's psychological, motivational, emotional, and cognitive inclination to seek genetic counseling when presented with potential health risks or recommendations. This construct encompasses several dimensions, including: (1) perceived personal risk for genetic conditions, (2) emotional readiness to engage in counseling, (3) motivation to act on health information, (4) awareness and understanding of genetic counseling, and (5) perceived benefits and barriers to counseling. An extensive review of existing literature was conducted to explore how this construct had been previously conceptualized and assessed. Related tools, such as the Perceived Need for Genetic Counseling (PNGC) scale, were reviewed for reliability, validity, and content coverage to inform the initial item development.

An initial pool of items relevant to the construct was generated, ensuring that each item addressed different aspects of propensity, such as psychological readiness, knowledge, perceived risk, and emotional and motivational factors. The items were designed to be clear, concise, and easily understandable by the participants. A panel of experts in genetic counseling, psychometrics, and psychology reviewed the items for relevance, clarity, and appropriateness. (This is trying to ensure face validity for the scale). Based on their feedback, the items were refined and revised to accurately reflect the intended construct.

A pilot test was conducted with a small sample of relatives of cancer patients to assess the clarity, comprehensibility, and functionality of the scale items. Feedback from the pilot participants helped identify any issues with item wording or interpretation. Following this, item analysis was conducted using statistical methods, including exploratory factor analysis (EFA), to identify coherent dimensions within the data and remove redundant or ineffective items. Factor loadings and inter-item correlations were used to refine the scale further, ensuring that only the most relevant items were retained.

The refined scale underwent a larger-scale validation, where confirmatory factor analysis (CFA) was applied to evaluate how well the remaining items measured the intended constructs. Reliability of the scale was assessed using Cronbach's alpha to ensure internal consistency, while validity was tested through measures of convergent validity (correlation with related constructs) and discriminant validity (lack of correlation with unrelated constructs).

All data were collected from relatives of cancer patients who were biologically related to the patients. Participants were informed of their rights to confidentiality and anonymity before data collection. All identifying information was removed, and data were anonymized to protect participants' identities. Only aggregated data were reported in publications, and strict data security measures were implemented to ensure that all personal information remained confidential and accessible only to authorized researchers.

RESULTS

The pilot study was conducted with a sample of fifty-one (n = 51) first-degree relatives of cancer patients receiving treatment at Obafemi Awolowo University Teaching Hospitals Complex (OAUTHC), Ile-Ife. The participants were selected based on their familial relationship with cancer patients, given their increased likelihood of benefiting from genetic counselling. Due to the absence of an existing scale specifically designed to measure the propensity to seek genetic counselling (PSGC), a new 22-item scale was developed and subjected to initial validation during the pilot phase.

The pilot study aimed to evaluate the reliability of the newly developed PSGC scale. Following a cross-validation process within the sample population, six items (items 14, 18, 19, 20, 21, and 22) were excluded from the final scale. These items were removed based on their low item-total correlation, which was below the accepted threshold of 0.30. The remaining 16 items demonstrated strong internal consistency, with item-total correlations ranging from 0.34 to 0.79, indicating that the retained items contributed meaningfully to the overall construct of propensity to seek genetic counseling. The final scale exhibited high reliability, with a Cronbach's alpha coefficient of 0.92, signifying excellent internal consistency. This suggests that the PSGC scale is a reliable tool for measuring the propensity to seek genetic counseling among relatives of cancer patients**.**

Confidentiality and Anonymity

All participants were assured of the confidentiality and anonymity of their responses throughout the research process. Data was collected and analyzed in aggregate form, with no identifying information attached to the responses. Participation in the study was voluntary, and participants had the right to withdraw at any time without any consequences.

Reliability and Item-Total Statistics

A reliability analysis was conducted to evaluate the internal consistency of the scale measuring participants' propensity to seek genetic counseling. The initial Cronbach's alpha was **0.909** for the full set of 20 items. After a stepwise removal of items with corrected item-total correlations below 0.30 (Items 19 and 20), the alpha increased slightly to **0.911**. Further refinement led to

the exclusion of two additional items (Items 18 and 21), improving the Cronbach's alpha to **0.918**, which indicates excellent internal consistency.

The corrected item-total correlations for the 16 retained items ranged from **0.339** to **0.794**, as summarized below:

1. *How likely would you seek genetic counseling if you realized that your close immediate relative has a heritable cancer? * – Corrected item-total correlation = **0.718**. Removal of this item would reduce Cronbach's alpha to **0.910**.

2. *How likely would you seek genetic counseling if you were experiencing the same symptoms that brought your relative to the hospital? * – Corrected item-total correlation = **0.569**. Deletion of this item would result in Cronbach's alpha increasing to **0.915**.

3. *How likely would you seek genetic counseling if your doctor advises you to go for it? * – This item exhibited a corrected item-total correlation of **0.775**, with an alpha of **0.908** if deleted.

4. *How likely would you seek genetic counseling if you realize that your state of health needs it? * – Corrected item-total correlation = **0.723**. The scale's reliability would remain at **0.909** if this item were removed.

5. *How likely would you seek genetic counseling if you seem unclear about certain discoveries about your biological family health? * – Corrected item-total correlation = **0.708**. Removal would lead to Cronbach's alpha of **0.910**.

6. *How likely would you seek genetic counseling if genetic test results of a close family member point to your susceptibility? * – This item had a corrected item-total correlation of **0.682**, with a reliability of **0.911** if removed.

7. *How likely would you seek genetic counseling if genetic testing is included in your health screening program? * – Corrected item-total correlation = **0.563**. Removing this item would increase alpha to **0.914**.

8. *How likely would you seek genetic counseling if you suspect your vulnerability due to earlier negative/unhealthy lifestyles? * – This item demonstrated the highest corrected item-total correlation (**0.794**), with a corresponding Cronbach's alpha of **0.908** if deleted.

9. *How likely would you seek genetic counseling if your friends choose to utilize the service? * – Corrected item-total correlation = **0.587**. Removal would lead to Cronbach's alpha of **0.914**.

10. *How likely would you seek genetic counseling if the services are accessible to you? * – Corrected item-total correlation = **0.694**, and deleting this item would result in a Cronbach's alpha of **0.910**.

11. *How likely would you seek genetic counseling if it is affordable to you? * – Corrected item-total correlation = **0.602**, with an alpha of **0.913** if removed.

12. *How likely would you seek genetic counseling if you are very confident of favorable genetic test results? * – Corrected item-total correlation = **0.540**. Deletion of this item would increase Cronbach's alpha to **0.915**.

13. *How likely would you seek genetic counseling if you are confident of the counselor's competence and capacity? * – Corrected item-total correlation = **0.456**, and removal would yield a Cronbach's alpha of **0.917**.

14. *How likely would you seek genetic counseling if you are sure of your privacy and confidentiality in the process? * – This item had the lowest corrected item-total correlation (**0.339**), and removing it would increase Cronbach's alpha to **0.920**.

15. *How likely would you seek genetic counseling if your immediate family members suggest such? * – Corrected item-total correlation = **0.608**, with Cronbach's alpha at **0.913** if deleted.

16. *How likely would you seek genetic counseling if you perceive that you are frightened by present health information available to you? * – Corrected item-total correlation = **0.447**, and removal would increase Cronbach's alpha to **0.917**.

Overall, the final scale of 16 items demonstrated excellent internal consistency, with a Cronbach's alpha of **0.918**, indicating the robustness of the scale in measuring the construct of interest. The corrected item-total correlations suggest that each item contributes meaningfully to the overall scale reliability.

Case Processing Summary

		N	%
Cases	Valid	48	92.3
	Excluded[a]	4	7.7
	Total	52	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.902	22

Item Statistics

	Mean	Std. Deviation	N
How likely would you be, to seek genetic counseling if you realized that your close immediate relative has an heritable cancer?	2.5625	1.20117	48
How likely would you be, to seek genetic counseling if you were experiencing the same symptoms that brought your relative to the hospital?	2.7083	1.39845	48
How likely would you be, to seek genetic counseling if your doctor advises you to go for it?	2.7708	1.11545	48
How likely would you be, to seek genetic counseling if you realize that your state of health needs it?	2.8750	1.28204	48

How likely would you be, to seek genetic counseling if you seem unclear about certain discoveries about your biological family health?	2.9375	1.11863	48
How likely would you be, to seek genetic counseling if genetic tets results of a close family point to your susceptibility?	2.6667	1.19098	48
How likely would you be, to seek genetic counseling if there is need for you to include genetic testing in your health sceening programme?	3.0208	1.12021	48
How likely would you be, to seek genetic counseling if you suspect your vulnerability due to earlier negative / unhealthy lifestyles?	2.5833	1.08830	48
How likely would you be, to seek genetic counseling if your friends choose to utilise the service?	2.6458	1.02084	48
How likely would you be, to seek genetic counseling if genetic counselling service is accessible to you?	2.9375	1.15604	48
How likely would you be, to seek genetic counseling if genetic counselling is affordable to you?	2.6042	1.19822	48
How likely would you be, to seek genetic counseling if you are very confident of favourable genetic test results?	2.6875	1.15143	48
How likely would you be, to seek genetic counseling if you are confident of the counsellor's competence and capacity?	2.9792	.93375	48
How likely would you be, to seek genetic counseling if you truly believe that counselling will help in obtaining adequate genetic information?	3.3125	.94882	48
How likely would you be, to seek genetic counseling if you are sure of your privacy and confidentiality in the process?	3.1875	1.04487	48
How likely would you be, to seek genetic counseling if your immediate family members suggest that you seek genetic counselling service?	2.7292	1.16216	48
How likely would you be, to seek genetic counseling if you percieve that "your faith is shaken" by present health information available to you?	2.9375	1.03977	48
How likely would you be, to seek genetic counseling if you are comfortable discussing your personal health information with health professionals?	3.0417	1.00970	48

How likely would you be, to seek genetic counseling if you are sure that genetic counselling will offer you useful opportunities in health decision making?	3.1875	1.04487	48
How likely would you be, to seek genetic counseling only if it is available online?	2.7917	1.14777	48
How likely would you be, to seek genetic counseling if the benefits in genetic counselling will outweigh its risks?	3.0208	.95627	48
How likely would you be, to seek genetic counseling if in only precarious health situations?	2.6875	1.05500	48

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
How likely would you be, to seek genetic counseling if you realized that your close immediate relative has an heritable cancer?	60.3125	175.496	.628	.895
How likely would you be, to seek genetic counseling if you were experiencing the same symptoms that brought your relative to the hospital?	60.1667	178.525	.440	.901
How likely would you be, to seek genetic counseling if your doctor advises you to go for it?	60.1042	174.223	.729	.893
How likely would you be, to seek genetic counseling if you realize that your state of health needs it?	60.0000	173.787	.636	.895
How likely would you be, to seek genetic counseling if you seem unclear about certain discoveries about your biological family health?	59.9375	178.273	.582	.897
How likely would you be, to seek genetic counseling if genetic tets results of a close family point to your susceptibility?	60.2083	175.488	.634	.895
How likely would you be, to seek genetic counseling if there is need for you to include genetic testing in your health sceening programme?	59.8542	180.766	.495	.899
How likely would you be, to seek genetic counseling if you suspect your vulnerability due to earlier negative / unhealthy lifestyles?	60.2917	174.296	.746	.893
How likely would you be, to seek genetic counseling if your friends choose to utilise the service?	60.2292	179.202	.610	.896

How likely would you be, to seek genetic counseling if genetic counselling service is accessible to you?	59.9375	173.549	.723	.893
How likely would you be, to seek genetic counseling if genetic counselling is affordable to you?	60.2708	174.797	.653	.895
How likely would you be, to seek genetic counseling if you are very confident of favourable genetic test results?	60.1875	177.219	.599	.896
How likely would you be, to seek genetic counseling if you are confident of the counsellor's competence and capacity?	59.8958	182.691	.529	.898
How likely would you be, to seek genetic counseling if you truly believe that counselling will help in obtaining adequate genetic information?	59.5625	186.805	.355	.902
How likely would you be, to seek genetic counseling if you are sure of your privacy and confidentiality in the process?	59.6875	183.198	.447	.900
How likely would you be, to seek genetic counseling if your immediate family members suggest that you seek genetic counselling service?	60.1458	176.468	.619	.896
How likely would you be, to seek genetic counseling if you percieve that "your faith is shaken" by present health information available to you?	59.9375	181.932	.496	.899
How likely would you be, to seek genetic counseling if you are comfortable discussing your personal health information with health professionals?	59.8333	187.035	.321	.903
How likely would you be, to seek genetic counseling if you are sure that genetic counselling will offer you useful opportunities in health decision making?	59.6875	190.390	.189	.906
How likely would you be, to seek genetic counseling only if it is available online?	60.0833	188.291	.232	.905
How likely would you be, to seek genetic counseling if the benefits in genetic counselling will outweigh its risks?	59.8542	187.531	.324	.902
How likely would you be, to seek genetic counseling if in only precarious health situations?	60.1875	185.730	.350	.902

Reliability
(Item 19 and 20 removed). These items are less than 0.30
Case Processing Summary

		N	%
Cases	Valid	48	92.3

	Excluded[a]	4	7.7
	Total	52	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.909	20

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
How likely would you be, to seek genetic counseling if you realized that your close immediate relative has a heritable cancer?	54.3333	160.780	.675	.902
How likely would you be, to seek genetic counseling if you were experiencing the same symptoms that brought your relative to the hospital?	54.1875	163.219	.493	.907
How likely would you be, to seek genetic counseling if your doctor advises you to go for it?	54.1250	160.282	.752	.900
How likely would you be, to seek genetic counseling if you realize that your state of health needs it?	54.0208	158.957	.686	.901
How likely would you be, to seek genetic counseling if you seem unclear about certain discoveries about your biological family health?	53.9583	163.147	.643	.903
How likely would you be, to seek genetic counseling if genetic tets results of a close family point to your susceptibility?	54.2292	162.138	.634	.903
How likely would you be, to seek genetic counseling if there is need for you to include genetic testing in your health sceening programme?	53.8750	166.367	.524	.906
How likely would you be, to seek genetic counseling if you suspect your vulnerability due to earlier negative / unhealthy lifestyles?	54.3125	160.092	.781	.899
How likely would you be, to seek genetic counseling if your friends choose to utilise the service?	54.2500	165.638	.613	.904
How likely would you be, to seek genetic counseling if genetic counselling service is accessible to you?	53.9583	160.296	.722	.901
How likely would you be, to seek genetic counseling if genetic counselling is affordable to you?	54.2917	162.126	.630	.903

How likely would you be, to seek genetic counseling if you are very confident of favourable genetic test results?	54.2083	164.041	.590	.904
How likely would you be, to seek genetic counseling if you are confident of the counsellor's competence and capacity?	53.9167	169.227	.522	.906
How likely would you be, to seek genetic counseling if you truly believe that counselling will help in obtaining adequate genetic information?	53.5833	173.865	.320	.910
How likely would you be, to seek genetic counseling if you are sure of your privacy and confidentiality in the process?	53.7083	170.594	.406	.908
How likely would you be, to seek genetic counseling if your immediate family members suggest that you seek genetic counselling service?	54.1667	162.610	.635	.903
How likely would you be, to seek genetic counseling if you percieve that "your faith is shaken" by present health information available to you?	53.9583	168.892	.474	.907
How likely would you be, to seek genetic counseling if you are comfortable discussing your personal health information with health professionals?	53.8542	174.425	.275	.911
How likely would you be, to seek genetic counseling if the benefits in genetic counselling will outweigh its risks?	53.8750	174.878	.276	.911
How likely would you be, to seek genetic counseling if in only precarious health situations?	54.2083	173.275	.302	.911

Reliability

(Item 18 and 21 removed)
Case Processing Summary

		N	%
Cases	Valid	49	94.2
	Excluded[a]	3	5.8
	Total	52	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.911	18

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cro Del

How likely would you be, to seek genetic counseling if you realized that your close immediate relative has an heritable cancer?	48.1020	143.760	.692	.90
How likely would you be, to seek genetic counseling if you were experiencing the same symptoms that brought your relative to the hospital?	47.9796	145.187	.525	.90
How likely would you be, to seek genetic counseling if your doctor advises you to go for it?	47.9184	142.827	.770	.90
How likely would you be, to seek genetic counseling if you realize that your state of health needs it?	47.8163	141.153	.718	.90
How likely would you be, to seek genetic counseling if you seem unclear about certain discoveries about your biological family health?	47.7551	145.064	.676	.90
How likely would you be, to seek genetic counseling if genetic tets results of a close family point to your susceptibility?	48.0204	144.604	.653	.90
How likely would you be, to seek genetic counseling if there is need for you to include genetic testing in your health sceening programme?	47.6531	148.481	.558	.90
How likely would you be, to seek genetic counseling if you suspect your vulnerability due to earlier negative / unhealthy lifestyles?	48.0816	143.535	.782	.90
How likely would you be, to seek genetic counseling if your friends choose to utilise the service?	48.0000	149.083	.601	.90
How likely would you be, to seek genetic counseling if genetic counselling service is accessible to you?	47.7143	144.083	.712	.90
How likely would you be, to seek genetic counseling if genetic counselling is affordable to you?	48.0408	146.040	.610	.90
How likely would you be, to seek genetic counseling if you are very confident of favourable genetic test results?	47.9388	148.017	.555	.90
How likely would you be, to seek genetic counseling if you are confident of the counsellor's competence and capacity?	47.6531	152.815	.486	.90
How likely would you be, to seek genetic counseling if you truly believe that counselling will help in obtaining adequate genetic information?	47.3265	157.974	.256	.91
How likely would you be, to seek genetic counseling if you are sure of your privacy and confidentiality in the process?	47.4490	154.503	.362	.91
How likely would you be, to seek genetic counseling if your immediate family members suggest that you seek genetic counselling service?	47.9184	146.202	.626	.90

How likely would you be, to seek genetic counseling if you percieve that "your faith is shaken" by present health information available to you?	47.7347	152.449	.445	.91
How likely would you be, to seek genetic counseling if in only precarious health situations?	48.0000	156.250	.282	.91

(Item 14 and 22 removed)

Case Processing Summary

		N	%
Cases	Valid	50	96.2
	Excluded[a]	2	3.8
	Total	52	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.918	16

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
How likely would you be, to seek genetic counseling if you realized that your close immediate relative has an heritable cancer?	42.3000	127.724	.718	.910
How likely would you be, to seek genetic counseling if you were experiencing the same symptoms that brought your relative to the hospital?	42.1800	128.396	.569	.915
How likely would you be, to seek genetic counseling if your doctor advises you to go for it?	42.1200	127.414	.775	.908
How likely would you be, to seek genetic counseling if you realize that your state of health needs it?	42.0200	125.816	.723	.909
How likely would you be, to seek genetic counseling if you seem unclear about certain discoveries about your biological family health?	41.9400	128.670	.708	.910
How likely would you be, to seek genetic counseling if genetic tets results of a close family point to your susceptibility?	42.2200	128.461	.682	.911
How likely would you be, to seek genetic counseling if there is need for you to include genetic testing in your health sceening programme?	41.8400	132.586	.563	.914

How likely would you be, to seek genetic counseling if you suspect your vulnerability due to earlier negative / unhealthy lifestyles?	42.2600	127.584	.794	.908
How likely would you be, to seek genetic counseling if your friends choose to utilise the service?	42.2000	133.673	.587	.914
How likely would you be, to seek genetic counseling if genetic counselling service is accessible to you?	41.9200	129.136	.694	.910
How likely would you be, to seek genetic counseling if genetic counselling is affordable to you?	42.2400	130.717	.602	.913
How likely would you be, to seek genetic counseling if you are very confident of favourable genetic test results?	42.1200	132.557	.540	.915
How likely would you be, to seek genetic counseling if you are confident of the counsellor's competence and capacity?	41.8400	137.402	.456	.917
How likely would you be, to seek genetic counseling if you are sure of your privacy and confidentiality in the process?	41.6400	138.929	.339	.920
How likely would you be, to seek genetic counseling if your immediate family members suggest that you seek genetic counselling service?	42.1200	131.128	.608	.913
How likely would you be, to seek genetic counseling if you percieve that "your faith is shaken" by present health information available to you?	41.9400	136.507	.447	.917

CONCLUSION

Genetic counseling plays a vital role in managing and understanding hereditary cancer risks, particularly for first-degree relatives of individuals with cancer, who face a heightened genetic risk. However, the lack of a specific tool to measure the **propensity to seek genetic counselling (PSGC)** necessitated the development and validation of a new scale. This project focused on creating a reliable and valid 16-item PSGC scale, addressing a critical gap in both research and clinical practice.

The rigorous process of developing the PSGC scale involved a comprehensive literature review, expert consultations, and pilot testing, resulting in a well-validated tool tailored to capture the key psychological, motivational, and behavioral factors influencing genetic counseling decisions. The scale's high internal consistency and reliability make it a valuable instrument for both clinical and research applications. It provides insights that can help healthcare professionals design targeted interventions to increase genetic counseling uptake and improve health outcomes for those at risk.

The development of the PSGC scale represents a significant step forward in understanding the decision-making processes surrounding genetic counseling. The scale's applicability extends beyond the initial target population, with future research needed to validate it across diverse groups. By offering a reliable measure of individuals' propensity to seek genetic counseling, this tool has the potential to enhance patient education, promote proactive health behaviors, and ultimately contribute to better management of genetic health risks.

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