

EXPLORING WORKING WOMEN'S PERCEPTION TOWARDS DIETARY SUPPLEMENTS INTAKE: A CASE STUDY

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ABSTRACT

This study investigates working women's views on dietary supplement use, focusing on age, income, marital status, and satisfaction levels to better understand their impact on usage decisions and willingness to promote supplements.

A varied sample of working women from various age groups, economic categories, and marital statuses took part in surveys and interviews, which revealed substantial correlations between these variables and supplement consumption patterns.

First of all, age is associated with motivations for supplement consumption, with women aged 25-35 preferring overall health improvement, while those aged 35-45 and 45-55 mention nutritional deficiencies and following medical advice.

Second, while there is a modest negative connection between income and supplement use among women, its low significance requires caution in interpretation. Third, marital status has little to no significant effect on supplement usage, implying that it plays a minor role in decision-making.

Finally, higher levels of satisfaction with supplements correlate with a greater likelihood of recommending them to others, demonstrating the role of satisfaction in advocacy. In summary, these findings shed light on the complex elements that influence working women's views and behaviors surrounding supplement intake. Understanding the roles of age, money, and satisfaction is critical for promoting healthy habits within this cohort. More study is needed to identify new characteristics and improve interventions aimed at optimizing supplement use among working women.

Keywords- Dietary supplements, working women, balanced diet, nutrients, diet.

INTRODUCTION

Dietary supplements are products that are intended to supply extra nutrients that may be lacking or insufficient in a person's diet. These supplements can comprise vitamins, minerals, amino acids, fatty acids, botanical extracts, and various other compounds, often in the form of pills, capsules, powders, or liquids. Dietary supplements are primarily intended to supplement the diet while also contributing to general health and wellness. Supplements are not designed to replace whole foods, but rather to cover nutritional gaps and support the body's optimal function.

Vitamins and minerals are critical micronutrients necessary for a variety of physiological functions and fall under the category of dietary supplements. These micronutrients serve critical roles in metabolic processes, immune system support, and overall cellular health. For example, vitamin C is known for its antioxidant effects and immune system support, but calcium is required for bone health. Dietary supplements may be suggested for people who

have specific deficiencies, such as iron deficiency anemia or vitamin D deficiency, or for groups with higher nutritional demands, such as pregnant women.

Exploring working women's perception towards dietary supplement intake reveals a complex interplay of health awareness, lifestyle demands, and social influences. Many working women, balancing professional responsibilities and personal life, view dietary supplements as a convenient means to meet their nutritional needs. They often consider supplements essential for maintaining energy levels, improving immunity, and addressing dietary gaps caused by hectic schedules or irregular meals. This perception is shaped by their increasing exposure to health information and a growing emphasis on preventive healthcare.

The motivations behind dietary supplement intake among working women often stem from the desire to enhance physical and mental well-being. With the pressure to perform well at work and manage household duties, many women perceive supplements as a way to combat fatigue, stress, and nutrient deficiencies. Factors such as age, education, and work environment significantly influence their attitudes, where educated women with access to health resources are more likely to have a positive perception of supplements. Additionally, workplace culture and peer influence play vital roles in shaping their choices.

However, concerns about the efficacy and safety of dietary supplements also influence working women's perceptions. Some are skeptical about the benefits, fearing potential side effects or interactions with other medications. The abundance of products available in the market, varying in quality and claims, adds to this uncertainty. This skepticism often leads to selective intake, where women rely on recommendations from healthcare professionals or trusted sources rather than self-prescribing supplements indiscriminately.

Overall, exploring working women's perceptions towards dietary supplements highlights the need for targeted education and reliable information dissemination. Awareness programs can address misconceptions, guide proper supplement use, and emphasize balanced nutrition alongside supplementation. Understanding these perceptions can help healthcare providers and marketers design better strategies to support working women in making informed decisions about their dietary supplement intake, ultimately promoting healthier lifestyles and improved well-being.

LITERATURE REVIEW

1. Asha L (2014) investigated working women's nutritional perceptions and socio-economic backgrounds in Bangalore, showing that many women understood nutritional importance but faced challenges balancing diet with work and family. Perception was linked strongly with education and economic status, influencing supplement intake and dietary choices.
2. Dickinson, Blatman, El-Dash, & Franco (2014) investigated consumer usage and motivations for dietary supplement intake. Their study found that supplement users were significantly more likely than non-users to engage in healthier lifestyle behaviors, including maintaining a balanced diet, regular doctor visits, sufficient sleep, frequent exercise, and healthy weight management. This pattern suggests a strong association between supplement use and overall health-conscious behaviors, indicating that supplement intake is part of a broader wellness lifestyle rather than isolated consumption
3. Gangde, (2015) investigated the food habits and nutritional conditions of working women in call centers across Indian cities. It revealed that many women had poor dietary habits, including low intake of fruits, vegetables, and milk products, but higher

consumption of cereals and junk food. Nutrition knowledge and attitude were significant factors influencing their dietary choices, and stress related to work impacted diets. The study highlights the influence of socio-economic backgrounds and work lifestyle on nutrition perceptions of working women.

4. Pajor et al., (2017) examined the beliefs of dietary supplement users and non-users, finding that women with stronger health intentions are more likely to consume supplements. Dietary supplements were seen as essential for maintaining and improving health, preventing illness, and improving mental and physical well-being. The study also showed distinct attitudes toward supplements between users and non-users, reflecting how perception influences supplement intake behavior.
5. Druker and Gesser-Edelsburg (2017) explored perceptions of dietary supplement use among physically active adult gym members in Israel. They identified a notable gap in risk perception between dietitians, gym members, and fitness trainers. Consumers of supplements exhibited low risk awareness, while trainers generally believed the benefits outweighed the risks and thus did not actively communicate potential dangers. Conversely, dietitians expressed skepticism regarding the general use of sports supplements and questioned trainers' nutritional knowledge. This divergence in perception highlights the need for improved education and communication among fitness professionals and supplement consumers to ensure informed decision-making.
6. Erland and Saxena (2017) conducted a detailed analysis of melatonin natural health products and supplements, revealing wide variability and quality concerns. Over 71% of tested supplements did not meet the label claims for melatonin content within an acceptable margin, and 26% were found to contain serotonin contaminants. Their findings underscore the critical need for stringent manufacturing controls to ensure product quality and safety. They emphasized the importance of clinicians and patients having confidence in supplement consistency, particularly for treating sleep disorders.
7. Smith-Ryan et al., (2022) emphasized that women are the largest consumers of dietary supplements and require sex-specific nutritional recommendations due to physiological differences. It discussed how working and active women use supplements primarily for energy, mental health, physical health, and body composition. The review notes the importance of evidence-based dietary supplements and third-party testing to ensure safety and efficacy for active women's unique needs.
8. Chiba et al., (2022) compared perceptions of dietary supplements between users and non-users, noting that users tend to have more favorable views on the safety and efficacy of dietary supplements. It emphasizes that perception influences dietary supplement intake, with users motivated by preventive health, curative benefits, and enhancing mental and physical performance. This study adds to understanding how perception shapes supplement use among women.
9. Barretto, Gouveia & Alves (2023) examined dietary supplement use among children and adolescents, highlighting regulatory and safety issues. Since such supplements are often unregulated and sold without prescription, unsupervised use raises concerns about dosing inaccuracies, inefficacy, or overdose risks. The authors stressed the increased risk associated with compounded formulations or multi-nutrient preparations and called for pediatricians to actively guide parents and patients on appropriate use to balance benefits and risks.

10. Gholamalizadeh & Hassanpour Ardekanizadeh (2023) provided a comprehensive systematic review on dietary supplements in cervical cancer patients. They reported potential benefits of folate supplementation against oxidative stress and inflammation, therapeutic effects of vitamin D, and zinc's role in promoting human papillomavirus clearance and reducing infection risks. Probiotic supplements may alleviate chemotherapy-related complications such as diarrhea and abdominal pain, and omega-3 fatty acids could reduce adverse effects of radiotherapy and chemotherapy. Their review highlights the multifaceted roles supplements may play in improving treatment outcomes and patient quality of life.
11. Arikawa et al., (2023) studied dietary supplement intake correlates in college students, finding a high prevalence of supplement use associated with healthier lifestyle behaviors. This association aligns with prior research and suggests that supplement users engage in overall health-focused behavior patterns. The authors suggested further mixed-method research to understand motivations behind supplement use and to evaluate perceived as well as actual health benefits among this population.

SIGNIFICANCE OF THE STUDY

1. Understanding age-related patterns can help in tailoring marketing strategies, product development, and public health initiatives targeted at specific age groups.
2. This study can be valuable for businesses in terms of pricing strategies and for policymakers in terms of addressing potential disparities in access to nutritional supplements.
3. Different marital statuses might have different dietary habits, and this information can be beneficial for creating targeted health campaigns or tailoring product offerings to specific demographic groups.
4. This information can guide companies in enhancing product quality and customer experience.

OBJECTIVES OF THE STUDY

The main objectives of the present study are:

1. To investigate the relationship between the age of women and the reasons for consumption of dietary supplements.
2. To ascertain the correlation between the income of women and the consumption of dietary supplements.
3. To ascertain the correlation between the marital status of women and the consumption of dietary supplements.
4. To investigate the relationship between overall satisfaction with the purchase of dietary supplements and willingness to recommend these to friends and family.

RESEARCH METHODOLOGY

The research was empirical in nature and undertaken to gain useful insight into the problem under study. The research provides useful information about the area of study to its providers so that they get an idea of the present situation and arrive at better solutions to it.

Sampling frame: The sampling frame includes working women of Chandigarh.

Sample size: The sample size of my research is limited to 42 respondents.

Sampling technique – It describes how the respondents should be chosen. Sample was chosen by convenient sampling method.

DATA SOURCES

The task of data collection begins after a research problem has been defined. Data collection is to gather the data from the population. The source of data can be either primary or secondary.

Primary data

During the course of the study personal interview and general discussions approach was used. The data was also collected by getting questionnaires filled in by the working women living in Chandigarh. The questionnaires were formulated keeping in mind the objectives of the study.

Secondary data

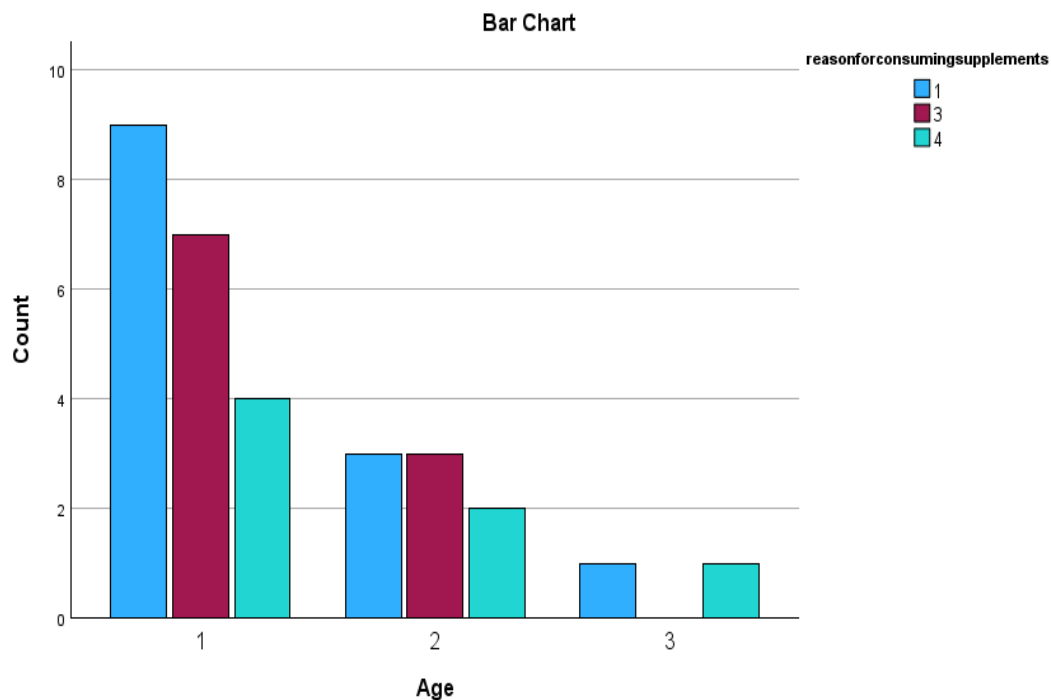
Secondary data has been collected from the printed articles available online and from various websites.

Tools of Data Analysis

- SPSS Software
- Percentages
- Tabulation
- Pie charts

1. To investigate the relationship between the age of women and the reasons for consumption of dietary supplements.

Age * reason for consuming supplements Crosstabulation					
Count					
		Reason for consuming supplements			Total
		1	3	4	
Age	1	9	7	4	20
	2	3	3	2	8
	3	1	0	1	2
Total		13	10	7	30



The above data shows that people falling in the age group of 25-35 consume dietary supplements because of reason no.1 i.e. improves overall health, category 2 i.e. 35-45 consume primarily because of two reasons 1 and 3 i.e. improves overall health and fills nutrient gaps and 45-55 because of two reasons 1 and 4 i.e. doctors recommendations and to improve overall health.

2. To ascertain the correlation between the income of women and the consumption of dietary supplements.

Correlation			
		Do you consume dietary supplements	Income
Do you consume dietary supplements	Pearson Correlation	1	-.184
	Sig. (2-tailed)		.243
	N	42	42
Income	Pearson Correlation	-.184	1
	Sig. (2-tailed)	.243	
	N	42	42

This statistical analysis is examining the relationship between the income of women and whether they consume dietary supplements. Let's break it down in simple terms:

1. Pearson Correlation Coefficient (r):

- The Pearson correlation coefficient measures the strength and direction of a linear relationship between two variables. It ranges from -1 to 1.
- In this case, the correlation between income and the consumption of dietary supplements is -0.184.
- A negative correlation (in this case, -0.184) suggests that as one variable increases (in this case, income), the other tends to decrease (in this case, the likelihood of consuming dietary supplements).

2. Significance (Sig.):

- The significance level (Sig.) tells us if the observed correlation is likely due to chance or if it's a meaningful relationship.
- The significance level here is 0.243, which is more than the conventional threshold of 0.05.
- In simple terms, this suggests that the correlation is not statistically significant at the 0.05 level. This means that the observed relationship between income and supplement consumption could likely be due to random chance.

3. Interpretation:

- The negative correlation of -0.184 suggests that there is a tendency for women with higher income to be less likely to consume dietary supplements.
- Since the correlation is not statistically significant at the 0.05 level (Sig. = 0.243), we should interpret the findings with caution. The relationship between income and supplement consumption might not be robust, or it could be influenced by other factors.

In simpler terms, the data suggests a modest negative connection between income and the likelihood of consuming dietary supplements among women. However, because the significance level is not very low, we should be careful not to overstate the strength of this relationship, as it may not be statistically meaningful.

3. To ascertain the correlation between the marital status of women and the consumption of dietary supplements.

Correlations			
		Doyouconsumedieta rysupplements	Maritalstatus
Doyouconsumedietarysuppl ements	Pearson Correlation	1	.049
	Sig. (2-tailed)		.756
	N	42	42
Marital status	Pearson Correlation	.049	1
	Sig. (2-tailed)	.756	
	N	42	42

This statistical analysis is examining the relationship between the marital status of women and whether they consume dietary supplements. Let's break it down in simple terms:

1. Pearson Correlation Coefficient (r):
 - The Pearson correlation coefficient measures the strength and direction of a linear relationship between two variables. It ranges from -1 to 1.
 - In this case, the correlation between marital status and the consumption of dietary supplements is 0.049.
 - A correlation close to zero (like 0.049) suggests a very weak or negligible relationship between the two variables.
2. Significance (Sig.):
 - The significance level (Sig.) tells us if the observed correlation is likely due to chance or if it's a meaningful relationship.
 - The significance level here is 0.756, which is much higher than the conventional threshold of 0.05.
 - In simple terms, this suggests that the correlation is not statistically significant at the 0.05 level. This means that the observed relationship between marital status and supplement consumption is likely due to random chance.
3. Interpretation:
 - The correlation of 0.049 indicates that there is almost no linear relationship between marital status and the likelihood of consuming dietary supplements.
 - Since the correlation is not statistically significant at the 0.05 level (Sig. = 0.756), we should interpret the findings with caution. It's likely that marital status and supplement consumption are not strongly linked based on this data.
 - In simpler terms, the data suggests that there is little to no connection between the marital status of women and their likelihood to consume dietary supplements. The observed correlation is not statistically meaningful and could be due to random chance.

4. To investigate the relationship between overall satisfaction towards the purchase of dietary supplements and willingness to recommend these to friends and family.

Correlation

		overallsatisfactiontowards the purchase of dietary supplements	I am willing to recommend these to my friends and family etc
overallsatisfactiontowards the purchase of dietary supplements	Pearson Correlation	1	.502**
	Sig. (2-tailed)		.005
	N	31	30
I am willing to recommend these to my friends and family etc	Pearson Correlation	.502**	1
	Sig. (2-tailed)	.005	
	N	30	33

** . Correlation is significant at the 0.01 level (2-tailed).

This statistical analysis is showing the relationship between two variables: "overall satisfaction towards the purchase of dietary supplements" and "willingness to recommend these supplements to friends, family, etc."

1. Pearson Correlation Coefficient (r):

- The Pearson correlation coefficient measures the strength and direction of a linear relationship between two variables. It ranges from -1 to 1.
- In this case, the correlation between overall satisfaction and willingness to recommend the supplements is 0.502.
- A positive correlation (in this case, 0.502) indicates that as one variable increases, the other tends to increase as well.

2. Significance (Sig.):

- The significance level (Sig.) tells us if the observed correlation is likely due to chance or if it's a meaningful relationship.
- The significance level here is 0.005, which is less than the conventional threshold of 0.05.
- In simple terms, this suggests that the correlation observed is statistically significant, meaning it's not likely to be a random occurrence.

3. Interpretation:

- The positive correlation of 0.502 suggests that as overall satisfaction with the purchased dietary supplements increases, the willingness to recommend these supplements to others also tends to increase.
- Since the correlation is statistically significant at the 0.01 level, we have a higher confidence that this relationship is not just by chance.

In simpler terms, the data indicates a meaningful connection between how satisfied someone is with their dietary supplements and how likely they are to recommend those supplements to others. If satisfaction goes up, the chances of recommending the supplements to friends and family also tend to go up.

RECOMMENDATIONS

Given the findings revealing weak or non-significant correlations between some characteristics (such as age, income, and marital status) and dietary supplement intake, supplement manufacturers may consider many methods to go forward and handle potential obstacles or possibilities.

1. Tailor Supplement Choices to Personal Health Goals:

Women should consider their age and specific health needs when selecting dietary supplements. For instance, younger women (aged 25-35) who prioritize overall health improvement may benefit from multivitamins, while those in their late 30s and 40s might focus on supplements addressing nutrient gaps or specific health concerns identified by healthcare professionals.

2. Prioritize Nutrient-Rich Foods:

While dietary supplements can be beneficial, they should not replace a balanced diet. Women should prioritize consuming nutrient-rich foods to meet their daily nutritional requirements.

Whole foods offer a wider range of nutrients and other health-promoting compounds that supplements may not provide.

3. Seek Professional Guidance:

Consulting healthcare professionals, such as doctors or registered dietitians, can help women make informed decisions about dietary supplement usage. Professionals can assess individual health needs, recommend appropriate supplements, and provide guidance on dosage and potential interactions with medications or existing health conditions.

4. Monitor Satisfaction and Adjust as Needed:

Women should regularly assess their satisfaction with dietary supplements and adjust their usage accordingly. If experiencing positive outcomes and satisfaction, they may continue with their chosen supplements. Conversely, if dissatisfaction arises or health goals change, they should be open to adjusting or discontinuing supplement usage under the guidance of a healthcare professional.

CONCLUSION

In conclusion, the case study examining dietary supplement use among working women highlights several crucial insights into their consumer behavior. The findings suggest a nuanced interplay of factors influencing supplement choices, including health concerns, lifestyle demands, etc. While the study provides valuable information about the current attitudes and behaviors of working women toward dietary supplements, it is essential to acknowledge its limitations. Future research should strive for a more comprehensive understanding, considering long-term observations and accounting for external influences. Despite these limitations, this study contributes to the broader discourse on consumer behavior by shedding light on the complex dynamics that shape working women's decisions regarding dietary supplement usage, offering a foundation for further exploration and targeted interventions in promoting healthier lifestyles among this demographic.

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