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Adres: Çaydaçıra Mah. Hacı Ömer Bilginoğlu Cad. No: 67/2-4/MERKEZ/ELAZIĞ
Telefon: 0532 643 75 23
Mail Adresi: asos@asosyayinlari.com
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İçindekiler

HOW DO THE SEMINARS OF BASIC BUDGET AWARENESS AFFECT GENERATION Z? THE CASE OF UNDERGRADUATES[15]

Assoc. Prof. Dr Gonca GÜNGÖR GÖKSU
ORCID ID: 0000-0123-4567-8901
Sakarya University, Faculty of Political Science, ggungor@sakarya.edu.tr
Assoc. Prof. Dr, Erdal EROĞLU
ORCID ID: 0000-0002-5359-2420
Çanakkale Onsekiz Mart University, Biga Faculty of Economics and Administrative, erdaleroglu@comu.edu.tr
Assoc. Prof. Dr, Durdane KÜÇÜKAYCAN
ORCID ID: 0000-0001-5515-2616
Eskişehir Osmangazi University, Faculty of Economics and Administrative, durdane@ogu.edu.tr
Assoc. Prof. Dr, Cihan YÜKSEL
ORCID ID: 0000-0003-1959-1245
Mersin University, Faculty of Economics and Administrative, cihanyuksel@mersin.edu.tr
Master Student, Gülşah EVCİM
ORCID ID: 0000-0123-4567-8901
Üniversite Adı, Fakülte, Bölüm, Mail adresi
Master Student, Edanur DEMİRCAN
ORCID ID: 0000-0123-4567-8901
Üniversite Adı, Fakülte, Bölüm, Mail adresi
Master Student, Hilal ALTAY
ORCID ID: 0000-0123-4567-8901
Üniversite Adı, Fakülte, Bölüm, Mail adresi
Ph.D. Student, Uğur COŞKUN
ORCID ID: 0000-0123-4567-8901
Üniversite Adı, Fakülte, Bölüm, Mail adresi

ABSTRACT

This research represents one of the few studies focusing on the relationship between public budget awareness and Generation Z higher education students in the relevant literature. Our aim was to assess and enhance the budget awareness levels of higher education students, who not only constitute a significant portion of the voting population in most countries but are also

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future decision-makers. Its hypothesis was that there was a significant difference between the pre-test and post-test measures, supporting the effectiveness of the intervention. To achieve this aim, we conducted the "Basic Budget Awareness" seminars at four Turkish state universities between December 2023 and May 2024. Prior to the seminars, we administered a pre-test consisting of 13 items to measure the participants' initial budget awareness levels. Following the seminars, we conducted a post-test 10–15 days later, and a total of 407 participants who attended these activities responded. This approach allowed us to compare the effect of the seminars on the budget awareness levels of higher education students. We applied a Paired T-Test using the SPSS software program to analyse the data, as the pre-and post-test data were normally distributed. The results revealed that the pre-test's reliability value (Cronbach's Alpha) was calculated as 0.91, which increased to 0.95 for the post-test. Furthermore, a significant difference was observed between the pre-and post-test scores, indicating that the "Basic Budget Awareness" seminars positively affected higher education students' public financial awareness levels. Consequently, we suggest that similar informative seminars or educational activities could significantly enhance the knowledge capacities of young citizens—who are potential taxpayers—and increase their interest in public financial policies.

Key words: Basic Budget Awareness, Higher Education Students, Generation Z

INTRODUCTION

Public finance is not only a technical process of balancing revenues and expenditures; it is also a fundamental governance tool that enables the realisation of democratic values such as fiscal transparency, accountability, and citizen participation. In this context, citizens' knowledge and awareness of public budget processes are critical for the effective functioning of budgetary democracy. However, the limited awareness of the public budget in Turkey leads individuals to lack sufficient knowledge on a constitutional issue such as the right to budget (Göksu, 2020). In particular, it is necessary to increase the level of awareness of Generation Z, which constitutes approximately 39% of the country's population and most of whom are studying in higher education institutions, about public finance as decision-makers who will shape public policies in the future (Turkish Statistical Institute [TUIK], 2022).

The primary purpose of this study is to evaluate the impact of "Basic Budget Awareness" seminars conducted in four state universities in Turkiye on the budget awareness levels of higher education students belonging to Generation Z. Numerous studies have examined budget awareness (Ciğerci & Pehlivan, 2022; Dilek & Zorkun, 2020; Göksu, 2020; Sapankaya & Tandırcıoğlu, 2022; Teyyare, 2018; Yıldız & Alkan, 2017) but they have explored participants' knowledge of budgets, their perceptions of the power of the purse, and their economic and fiscal literacy across various groups, including university students, citizens, and municipal council members. In this study, the pre-test data administered to the participants before the seminars and the post-test data administered after the seminars were compared. The study's findings also provide a scientific basis for course proposals and policy recommendations that can be disseminated in universities.

CONCEPTS OF BUDGET AWARENESS AND LITERACY

The fact that the terms "conscious" and "consciousness" have been used in English since the 17th century shows that individual awareness can be handled within a historical development process. The concept of consciousness originates from the Latin verb "conscio", a combination of the words "cum" meaning "together" and "scio" meaning "to know". This origin refers to being aware of information and sharing this information with other people or oneself (Zeman, 2006). This etymological structure reflects the essence of the concept of budget awareness. This is because an individual with budget awareness is expected to develop an awareness of his/her financial situation and associate this awareness with a sustainable financial management approach.

Although budget awareness is a term that has been the subject of few studies both in Turkey and in the international literature (Barut & Türkal, 2024), citizens' sensitivity to legal/constitutional regulations related to the state budget, their understanding of the source of public revenues, the public services for which these revenues are used, and their close monitoring of budgetary developments (Göksu, 2020). In this context, raising budget awareness is of great importance both for enhancing democratic participation and for more efficient and transparent use of public resources. However, this awareness is possible not only through access to information but also by increasing the level of financial literacy and disseminating awareness-raising activities for citizens. In this context, various institutional and structural instruments for raising budget awareness come to the fore. Transparency-oriented digital budget platforms to be implemented by public institutions and regular public disclosure of simplified and understandable budget reports increase the transparency and accountability of budget processes (Bouckaert, 2017). In addition, participatory budgeting mechanisms can strengthen democratic governance by encouraging direct participation of individuals in budget decision-making processes (Shah, 2007). In addition, financial literacy programs in educational institutions and local government life centers make an important contribution to individuals' understanding of public budget processes. Visual and digital communication tools (e.g. social media campaigns, public service announcements, and short informational videos) that communicate budget issues in plain language to large audiences also raise awareness (Waddington et al., 2019). Digital solutions such as open data portals and budget monitoring systems allow citizens to access up-to-date data on public revenues and expenditures and monitor budget processes (Lnenicka & Nikiforova, 2021). Supporting all these practices with the supervisory and awareness-raising activities of civil society organizations contributes to the sustainable development of budget awareness at the institutional and social levels (Göksu, 2020).

The state is obliged to provide public services in line with its constitutional and social responsibilities. The fulfilment of these services inevitably requires a certain level of public expenditure. All expenditures made and revenues collected by the state constitute the basis of the budget. The state budget has historically been defined as a financial document covering a certain period, in which revenues and expenditures are planned in advance, and which enters into force through a legal approval process. However, today, the budget is not only a financial plan but has become an important tool that shapes the economic structure and reveals the guiding role of the state on the economy (Edizdoğan & Çetinkaya, 2016). In this context, meeting common expenditures by the public budget shaped by co-financing has a basis that strengthens the understanding that the budget in question is the common resource of all citizens living in that country (Kılavuz & Yüksel, 2019). Therefore, within the scope of the right to budget, it is critical for citizens to be able to read and understand the information and documents related to these processes correctly, and thus to have budget awareness and literacy to fulfil their social responsibilities (Eroğlu & Kaynar, 2023).

Budget literacy is a level of competence that enables individuals to have the ability to read, understand and interpret budget processes (Eroğlu & Kaynar, 2023). Having financial knowledge and using this knowledge correctly and appropriately provides significant advantages for individuals to achieve their goals. The conscious application of financial knowledge, especially at the individual level, not only contributes to personal welfare but also creates positive effects at the social and public levels (Çetinkaya, 2022). Budget literacy facilitates individuals' economic lives by enabling them to consciously manage their financial transactions such as spending, saving, borrowing, and investing. Having this knowledge and skills not only meets daily needs but also prepares individuals for the uncertainties of life such as unemployment, health problems, and retirement. Budget literate individuals can plan their income effectively, keep their expenses under control, and develop strategies to minimize financial risks. This forms the basis of sustainable economic stability at both personal and societal levels (Tomášková et al., 2011). The concept was first introduced by Masud et al. (2017). Since 2015, the concept of budget literacy has received increasing attention in academic studies due to the role it plays in individuals' economic decision-making processes. Factors such as global economic fluctuations, the proliferation of digital financial instruments, and the complexity of individual financial management have made this issue even more important for both researchers and policy-makers (Titko & Lace, 2013).

There are various support mechanisms provided by the government to improve budget literacy. One of the most important of these is the implementation of “Citizen Budgets”. Citizen Budgets aim to simplify the technical, complex, and often specialized nature of the budget process and present it to citizens in an understandable way. In this way, individuals can not only keep track of public revenues and expenditures but also learn to read and interpret budget-related legal regulations and exercise their rights in line with these regulations. Citizen Budgets are important tools that strengthen the culture of transparency, accountability, and participation at the societal level (Elena, 2024).

METHODOLOGY

To achieve the study's aim, we conducted a paired t-test, which probably the most widely used methods in statistics for the comparison of differences between two samples (Xu et al., 2017), in comparing the means on public budgeting awareness of 407 undergraduates who participated in both the pre-test and post-test. The participants were from four Turkish state universities: Çanakkale Onsekiz Mart University (ÇOMU), Eskişehir Osmangazi University (ESOGU), Mersin University (MEU), and Sakarya University (SAU). First, we performed the survey, “Citizens' Budget Awareness and Effective Factors”. We performed "Basic Budget Awareness" seminars across the various educational units in the relevant universities. Each seminar lasted approximately 45 minutes, aiming to educate undergraduate students on topics such as the state budget, the constitutional power of the purse, and fundamental budget concepts, such as public revenues and expenditures. Before the seminars, we administered the pre-test, ensuring participants provided informed consent at the beginning of the survey form. Participation was entirely voluntary, enabling us to objectively assess students' awareness of the state budget, as the majority had not taken courses like public finance or state budgets during their studies. This survey, designed by Göksu (2020), included a total of 12 items and helped us calculated their budget awareness, too. We also added the item "I consider that I am aware of the state budget" to the survey in order to better understand their perception of budget awareness. In the second phase of the research, we prepared an online post-test via Google Forms, including the similar 12 items and then sent e-mail, including in the online post-test to them ten to fifteen days after the seminars. Finally, a total of 407 undergraduates responded both of the pre-test and post-test.

We could measure varies on their budget awareness levels, through the Paired t-test. The conditions for conducting a paired sample t-test are: i. The data must be interval or ratio data. ii. Both sets of paired data should be normally distributed (Alfajri et al., 2023). Because we verified that the data were normally distributed, as the Skewness and Kurtosis values for all items fall between -1.5 and +1.5 (Tabachnick & Fidell, 2012). Accordingly, the hypotheses are shown below:

H0: There is not a notable difference between the pre-test and post-test measures, highlighting the effectiveness of the “Basic Budget Seminars” in enhancing budget awareness of Generation Z undergraduates.

H1: There is a notable difference between the pre-test and post-test measures, highlighting the effectiveness of the “Basic Budget Seminars” in enhancing budget awareness of Generation Z undergraduates.

Findings and Discussion

We conducted the paired t-test, using SPSS 23 software programme. The findings ascertained that the pre-test's reliability value (Cronbach's Alpha) was calculated as 0.91, which increased to 0.95 for the post-test. Table 1 presents the information about demographic profile of participants.

Table 1. Demographic profile of participants

	Frequency	**Percentage**
University		
ÇOMU	60	14,8
ESOGU	58	14,2
MEU	166	40,9
SAU	117	30,1
Degree		
1st year	143	35,2
2nd year	99	24,2
3rd year	88	21,7
4th year	54	13,2
More than four years	23	5,7
Gender		
Female	295	72,4
Male	112	27,6
Total	***407***	***100***

Source: Compiled by authors.

According to the table, the participants are distributed across four universities: ÇOMU, ESOGU, MEU, and SAU. MEU has the highest number of participants with 166 individuals, representing 40.9% of the total. SAU follows with 117 participants (30.1%), while ÇOMU and ESOGU have 60 (14.8%) and 58 (14.2%) participants respectively. The degree levels of the participants range from 1st year to more than four years. The majority of the participants are in their 1st year, with 143 individuals accounting for 35.2% of the total. The 2nd year follows with 99 participants (24.2%), and the 3rd year with 88 participants (21.7%). The 4th year has 54 participants (13.2%), and those with more than four years of study are the least represented with 23 participants (5.7%). The gender distribution shows a significant majority of female participants, with 295 females (72.4%) compared to 112 males (27.6%). Table 2 also presents the frequencies and value variations for each item in the pre- and post-test.

Table 2. Frequencies and value variations for each item

Items	N	Mean (Pre-test)	Mean (Post-test)	Increase percent
1. Being knowledgeable about the Citizen's Budget Guide and the Citizen's Final Account Report	407	2,151	3,464	61,04
2, Being sufficiently informed about the state budget.	407	2,558	3,169	23,89
3. Showing interest in matters related to the state budget.	407	2,421	3,115	28,67
4. Being knowledgeable about the figures of public income within the state budget	407	2,381	3,034	27,43
5. Being knowledgeable about the figures of public spending within the state budget	407	2,727	3,130	14,78
6. Being knowledgeable about how public funds are designated for various spending categories within the state budget.	407	2,494	3,071	33,72
7. Being knowledgeable about the methods and procedures used in creating budgets, as well as the financial transactions that occur as part of budget management.	407	2,651	3,545	56,91
8. Being knowledgeable about a government-endorsed online platform that disseminates details and statistics related to the state budget	407	1,968	3,088	46,27
9. Being knowledgeable about the Public Financial Management and Control Law No. 5018	407	3,084	3,648	18,29
10. Being knowledgeable about the link between taxes and public services	407	2,393	3,648	52,44
11. Being knowledgeable about the constitutional power of the purse	407	3,465	3,936	13,60
12. Being knowledgeable about how public funds are distributed among various public services	407	2,663	3,117	17,05
13. Considered to have an awareness of the state budget	407	2,558	3,508	37,14

Source: Compiled by authors.

According to the table, the findings indicate a significant increase in knowledge across all items, with the most notable improvement seen in understanding the Citizen's Budget Guide and the Citizen's Final Account Report, which increased by 61.04%. This finding suggests that these topics' educational materials or methods were particularly effective. In contrast, the lowest increase was in knowledge about public spending figures within the state budget, which saw only a 14.78% rise. It indicates a potential area for further educational focus. Additionally, the table reveals a substantial improvement in participants' overall awareness of the state budget, with an average increase from 2.494 to 3.071, reflecting a rise of 33.72%. This general enhancement in knowledge underscores the effectiveness of the intervention in raising public understanding of state budget-related matters.

Other areas, such as knowledge about how public funds are allocated to various spending categories and the connection between taxes and public services, also demonstrated significant increases of 56.91% and 52.44%, respectively. These findings emphasize the importance of targeted educational programs to improve public financial literacy and engagement with state budget processes. Furthermore, the data highlights specific topics where knowledge gains were less pronounced. For example, understanding the constitutional power of the purse increased by only 13.60%, and knowledge about public spending figures rose by just 14.78%. These lower increases suggest that these subjects may be more challenging for participants or that the educational approach in these areas may need refinement. Overall, the significant increase in awareness of the state budget, recorded at 37.14%, indicates a successful improvement in public perception and understanding, essential for fostering a more informed and engaged citizenry in budgetary matters. Table 3 shows the budget awareness scores of Generation Z undergraduates, calculated with the pre-and post-test responses.

Table 3. Budget awareness scores by pre-test and post-test

	N	Pre-test	Post-test	Increase Percent	Sig. (2-tailed)
Budget Awareness	407	2,60	3,39	30%	,000

Source: Compiled by authors.

The pre-test average score of 2.60 among Generation Z undergraduates reflects a baseline understanding of budgeting before the intervention. This score increased notably to 3.39 in the post-test, marking a significant 30% increase in budget awareness. This improvement underscores the effectiveness of the educational initiative targeted at this demographic, known for its unique financial behaviors and challenges. In other words, this finding suggests that the "Basic Budget Awareness" seminars implemented between the pre-test and post-test effectively enhanced the participants' understanding and awareness of budgeting. The statistical significance of this increase, with a p-value of 0.000 that confirms that the observed improvement in budget awareness scores is highly significant and not attributable to random variation. The Sig. (2-tailed) < 0.05 and H0 is rejected (Fiandini et al., 2024). Accordingly, we accepted the H1 hypothesis, representing a notable difference between the pre-test and post-test measures, highlighting the effectiveness of the "Basic Budget Awareness" seminars in enhancing budget awareness of Generation Z undergraduates.

Such a low p-value indicates a strong correlation between the seminars and the enhanced understanding of budgeting among the participants. The significant increase in their scores suggests that the seminars successfully addressed key areas of budgeting, such as expense tracking, saving strategies, and financial planning, which are essential for young adults entering the workforce or managing their finances independently. Finally, Table 4 illustrates the findings of comparing of pre-test and post-test for the pairs, representing each items.

Table 4. Comparing of pre-test and post-test for each pairs

	Mean	Std. Deviation	Std. Error Mean	t	Sig. (2-tailed)
Pair 1	-1,31294	1,51051	,07487	-17,536	,000
Pair 2	-,61179	1,43725	,07124	-8,588	,000
Pair 3	-,95086	1,45796	,07227	-13,157	,000
Pair 4	-,69412	1,54144	,07641	-9,085	,000
Pair 5	-,65356	1,52819	,07575	-8,628	,000
Pair 6	-,40295	1,59426	,07902	-5,099	,000
Pair 7	-,57740	1,56416	,07753	-7,447	,000
Pair 8	-,89435	1,73664	,08608	-10,390	,000
Pair 9	-1,12039	1,66617	,08259	-13,566	,000
Pair 10	-,56511	1,60359	,07949	-7,109	,000
Pair 11	-1,25546	1,49133	,07392	-16,983	,000
Pair 12	-,47064	1,64005	,08129	-5,789	,000
Pair 13	-,45506	1,61911	,08026	-5,670	,000

Source: Compiled by authors.

The table provides further insight into the changes observed across different data points. Each pair shows a negative mean difference, indicating increased scores from the pre-test to the post-test. The standard deviations and standard errors of the mean are also provided, showing the variability and precision of the measurements. The t-values and the corresponding p-values [all 0.000] for each pair confirm the statistical significance of the observed changes. This comprehensive analysis across multiple pairs reinforces the considerable result that the “Basic Budget Seminars” had a substantial and statistically significant impact on improving the budget awareness among Generation Z.

CONCLUSION

The main motivation of this study is to identify and improve the level of budget awareness of Generation Z, who are the decision makers of the future and constitute the majority of the voting population in Turkiye. A budget-conscious society with a high level of budget literacy and responsibility for its budgetary rights will have a high level of budget awareness. Therefore, in this study, we have presented the results on Generation Z's basic budget awareness by applying pre-test and post-test in seminars. To determine this, “Basic Budget Awareness” seminars were conducted at four state universities in Turkiye: ÇOMU, ESOGU, MEU, and SAU. The tests applied before and after the seminars included 12 questions and were applied to 407 undergraduates. We measured budget awareness levels using a paired t-test.

According to the findings, there is a substantial increase in knowledge in all items, especially in understanding of the Citizen's Budget Guide and the Citizen's Final Account Report. In addition, the budget awareness scores calculated from the pre- and post-test responses of Generation Z university students indicate a significant increase in awareness of the state budget and a successful improvement in public perception and understanding, which is necessary to reach a more budget-conscious citizenry. Furthermore, when comparing the pre-test and post-test for pairs representing each item, the findings show that the “Basic Budget Seminars” for Generation Z had a remarkable impact on the development of budget awareness. The paired t-test results revealed a notable increase in mean scores from the pre-test (2.60) to the post-test (3.39), with a statistically significant improvement of 30% ($p < 0.05$). This confirms the effectiveness of the educational intervention in enhancing participants' understanding of key budget-related concepts, such as public revenues, expenditures, and the constitutional power of the purse.

The analysis of individual items further highlighted areas where the seminars were particularly impactful, such as knowledge of the Citizen's Budget Guide and the link between taxes and public services, which saw increases of 61.04% and 52.44%, respectively. However, topics like public spending figures and the constitutional power of the purse showed smaller improvements, suggesting these areas may require additional focus in future educational initiatives. The high reliability scores - Cronbach’s Alpha: 0.91 for pre-test, 0.95 for post-test- and the consistent statistical significance across all measured pairs reinforce the robustness of the findings. These results underscore the value of targeted educational programs in improving financial literacy and public engagement with state budget processes, particularly among young adults.

In conclusion, the "Basic Budget Awareness" seminars proved to be a highly effective tool for enhancing budget awareness among Generation Z undergraduates. Future research could explore long-term retention of this knowledge and the potential for scaling such programs to broader audiences. Policymakers and educators may consider integrating similar initiatives into curricula to foster a more financially informed citizenry.

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