

## MANAGEMENT OF SUSTAINABILITY KNOWLEDGE OF THE GENERATION Z ON SOCIAL MEDIA

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**Purpose:** The aim of the article is to present a model approach to knowledge management in the field of sustainability in social media and to discover whether social media properly fulfill their role in the key processes of this management in the case of generation Z. They include the acquisition, collection and development of knowledge, as well as its dissemination and use.

**Design/methodology/approach:** The qualitative method was used in the research. Focus studies were conducted using the method of partially defined, focus group interviews. The authors adopted the principle of a posteriori research in close correlation with theoretical thinking, while recognizing the studied socio-cultural reality as a system of interrelated elements. The actual research was preceded by a critical analysis of domestic and foreign literature on the subject.

**Findings:** The study found that, in terms of sustainability, young people are more likely to encounter content on social media about environmental issues and less likely to encounter content about social issues. Social media contribute to the growth of their interest in sustainability issues. The young generation requires that the content on sustainability posted on social media be understandable, easily digestible and not overloaded with facts. The authenticity of the presented content, a title that arouses curiosity and interesting graphics are important.

**Research limitations/implications:** The study focused on young people. Another proposed line of research is therefore to include other age groups, such as the elderly and middle-aged people.

**Practical implications:** The conclusions and solutions contained in the article may contribute to a better use of social media in managing the knowledge of the young generation in the field of sustainability.

**Social implications:** This will positively influence the shaping of pro-environmental and pro-social attitudes and behaviours of the young generation and increase their activity in the area of sustainability.

**Originality/value:** The model approach to the management of sustainability knowledge on social media presented in this article organises this area and identifies opportunities to better exploit its potential.

**Keywords:** Knowledge management, sustainability, social media, generation Z.

**Category of the paper:** Research paper.

## 1. Introduction

Progress in the area of sustainability requires knowledge, as well as pro-environmental and pro-social actions. Accelerating knowledge-based sustainable development is particularly important today, in an era of increasing environmental and social threats. Many producers and consumers continue to ignore these threats, failing to see their negative impact on the state of the Earth and its potential. Research shows that corporate involvement in sustainable development goals is still limited. The involvement is largely symbolic and intentional, rather than substantive (e.g. van der Waal, Thijssens, 2020). D. Fogel emphasises that the modern industrial society can collapse if resources are mismanaged and abused (Fogel, 2016). Modern societies have to solve not only environmental problems but also social ones. They include: poverty, exploitation, unemployment, crime, drug addiction, alcoholism, social diseases, and epidemics. The deteriorating state of our planet and social problems threaten the existence of future generations.

Further progress in the area of sustainability depends on young people of generation Z. Young people will soon begin to take over the reins of organisations and determine the directions of their development. In their various roles in their societies, young people will either accelerate sustainable development by making determined attempts to eliminate environmental and social threats or they will hinder it. An important factor influencing the pro-environmental and pro-social behaviour of the younger generation is sustainability knowledge. Such knowledge allows better understanding of the nature and extent of environmental and social threats as well as provides information on how to eliminate them. In addition, it shapes pro-environmental and pro-social attitudes and inspires young people to undertake pro-environmental and pro-social actions, as well as to search for new, effective solutions in this sphere.

The Internet, including social media, plays a special role in the lives of the young generation. In January 2022, of the 7.91 billion people living on Earth, as many as 4.95 billion (69.5%) used the Internet. The number of social media users has reached 4.62 billion people, representing almost 94% of all internet users worldwide. The largest number of social media users is young people aged 20-29 (32.2%) (Polewko, 2022). Also in Poland, the number of social media users is very high at 27 million people. The share of people aged 18-34 in this group is 48.8% (Pietraszek, 2022). Social media "allow customers to be served and educated" (Gamoń, 2021) and "provide an opportunity to develop relationships and deepen them, starting from casual acquaintances, ending with the status of a friend. Social media are tools that significantly increase the effectiveness of communication activities" (Andrzejczyk, 2022). The smartphone through which young people most often access social media "has become a personal medium that allows the user to be always available and connected both to other people and to businesses" (Kotler, Stigliano, 2022). However, the advantages and potential of

social media are still have not been fully exploited. "Unfortunately, due to the lack of the necessary practice of using social media, many organisations still approach their presence in this channel in an unplanned manner and without a broader vision of how to use the opportunities it offers" (Kaznowski, 2021). This incomplete use of social media also applies to the dissemination of sustainability knowledge among the young generation.

Social media are very popular among young people and should therefore be used to a high degree to communicate sustainability knowledge to them. Is this the case in reality? This question prompted the authors of this article to formulate the following research problem: what is the role of social media in the acquisition, development, use and dissemination of sustainability knowledge by the young generation? These activities are categorised as key knowledge management processes. Such a broad approach to this problem has not been reflected in the research literature.

The article contributes to research and practice. It enriches the achievements in sustainable research and sustainable management. It additionally shows the state of management of sustainability knowledge of the young generation by revealing its flaws and shortcomings. Finally, it indicates actions that should be taken to improve this management. Therefore, it can contribute to greater utilisation of the potential of social media in managing the young generation's sustainability knowledge, which will certainly contribute to balancing intergenerational needs.

## **2. Literature review**

The authors of this article carried out an extensive review of the literature, looking for publications and research results on the topic, i.e. the role of social media in the knowledge management of the generation Z in the field of sustainability. The literature review has shown that to date, no research has been conducted in such a broad perspective linking all four components simultaneously: knowledge – the young generation – social media – sustainability. Instead, research has been done on the relationship between some of the components of this 4-element system. In the following section, we present the most important research achievements in this area.

Some researchers have focused on finding links between the younger generation, social media and sustainability. Researchers appreciate the role of social media in sustainability. "In recent years, social media technologies have gained increased attention for their potential to amplify environmental concerns and encourage sustainable behaviours among people". These authors carried out a study that aimed to determine the role of social media in the consumer purchasing behaviour for wine between the millennial and non-millennial generations. The results of their study show the power of social media in raising the awareness

of sustainable development, and therefore influencing the consumer purchasing behaviour for wine (the higher price segment). From a marketing perspective, companies should improve their capacity to share and communicate their environmental activities through social media (Sogari et al., 2017).

The characteristics of meaning-making in young people's conversations about environmental and sustainability issues on social media (in an online community) (Andersson, Ohman, 2017) were investigated. Other researchers considered the relationship between students' social media exposure and their valuation of sustainability in entrepreneurship and of environmental and social care as drivers of new venture creation. They showed that a higher frequency of reading such content is related to a higher perceived relevance of environmental sustainability, social welfare, and fair trade (Verdugo, Villarroel, 2021).

The scientific literature also includes work on the relationship between:

- a. social media, sustainability and knowledge,
- b. sustainability and knowledge as seen through the lens of education,
- c. knowledge and social media.

A social experiment was carried out through social media accounts to increase the level, effectiveness, skills and actions of people for life. The results of the experiment show that 49% of the followers learned more about sustainable living and 25% developed at least one sustainable habit in two months (Al.-Mulla et al., 2022). A holistic approach to education for proper development was also examined, with an emphasis on identity, motivation and higher order dispositions (Podger et al., 2010) and higher order dispositions, and sought to determine how internal or external social media technologies are used for knowledge sharing at work or for professional development. Among other things, these researchers came to the following conclusion: the members of Generation Y (younger generation) or employees with lower level positions are less likely to use social media technologies in the workplace. We would postulate that this is because social media tools are more common among young people but they use them for private purposes, while using these tools for work (mainly for knowledge sharing or professional development) is more typical for Generation X and Baby Boomers (older generations) (Gaal et al., 2015).

The use of social media in the sphere of sustainability has received slightly more attention in academic literature. Scientific results show that listening on social networks can be used more effectively than other more traditional activities. The researchers analysed the different contexts and areas of knowledge where the concept of sustainable development is used in society by using social listening on Twitter, one of the most popular social networks today. In addition, they mapped the social network of users who generated or spread content regarding sustainability on Twitter (Ballestar et al., 2020). The results showed how 16 global corporations from different industry sectors use social media platforms and corporate social responsibility reports to communicate about sustainability. These researchers concluded that communication varies across firms and industries regarding the types of sustainability initiatives reported,

metrics employed, and communication media utilised. In addition, green firms are more active than non-green firms both in addressing sustainability and in general social media activity (Reilly, Hynan, 2014).

Searching tweets (micrologues) to explore trends and retrieve ideas for various purposes such as product development, technology and sustainability oriented issues showed that the social media data mining process can be used as a decision making tool to detect innovative ideas or solutions for product or service (Ozcan et al., 2021). Researchers who have focused on the B2B sector argue, that Big data and social media analytics can facilitate business to business sustainability. Web analytics can support the social, environmental and economic agendas of business to business sustainability (Sivarajah et al., 2020).

The young generation mentioned in the first part of the Literature Review is being researched more extensively in two areas related to the subject of this article: 1. the young generation - social media 2. the young generation - sustainability. Malin Sveningsson studied how young people using social media are interested in civic and political issues. He concluded that the participants appreciated the immediateness of social media news, and felt that it could provide insights into new perspectives and make news stories feel more relevant. However, this was also seen as one-sided, fragmented and subjective, giving a biased, or even false, image of what happens in society (Sveningsson, 2015).

Social media "influence the life style of youth so that brands and companies can exploit the space of social networking sites to create loyalty among youth". For example, if social media sites promote a healthy lifestyle through their posts, videos, and messages, that will help to develop a healthy young generation (Kulandairaj, 2014). There is evidence of young people's engagement with social media and the influences they report on their health-related behaviours (Goodyear et al., 2019).

The question arises of how to best teach environmental sustainability in order to reach diverse student mindsets. This is a important topic because, "environmental sustainability represents a polarising topic with some students dismissing its importance and legitimacy" (Swaim et al., 2013). Student attitude represents the strongest influence on environmental sustainability intention. It is important to open up spaces for deliberation and channels for youth engagement in order to embed sustainability in global cities. It identified "young people's relatively low prioritization of most environmental issues – due to an overwhelming sense of economic precarity and a lack of opportunity to reflect upon the relevance of environmental issues for their everyday lives" (Sloam, 2020). Therefore, there should be a scholarly discussion about the roles children and young people might take as agents of change in sustainable community development and what forms of learning are needed to achieve this goal (Percy-Smith, Burns, 2013).

The extensive literature review carried out by the authors of this article demonstrates that there is a research gap regarding the topic, namely the role of social media in the management of the young generation's sustainability knowledge. No publications on this topic were found that took into account knowledge management processes such as its acquisition from social media by the generation Z, its collection, development, use and dissemination. It has been shown above that researchers have only focused their research inquiries on fragments of the subject matter reflected in the title of this article. Its authors set out to fill this gap.

### **3. A model approach to management of sustainability knowledge on social media**

The model approach the management of sustainability knowledge on social media presented in this section was developed by the authors of this article and is their own concept. The two key terms of this concept are 'sustainability knowledge' and 'management of this knowledge on social media'.

Let us first address the subject of management, i.e. sustainability knowledge. This is a young, emerging area of knowledge, not yet fully formed. It covers many different types of issues. The content of sustainability publications mainly focuses on:

- general sustainability issues (e.g. Brinkmann, 2016; Thiele, 2016; Holden et al., 2018),
- sustainability action strategies (e.g. Fogel, 2016; Avlonas, Nassos, 2014),
- sustainable business (Jeanrenaud et al., 2017; Lenox, Chatterji, 2018; Carbo et al., 2018),
- sustainable management (e.g. Cohen, 2011; Haugan, 2014; Bossink, 2012),
- sustainable marketing (e.g. Belz, Peattie, 2010; Emery, 2012),
- sustainable projects, production and labour (e.g. Brzozowska et al., 2021; Stark et al., 2017; Epstein, Rejc-Buhovac, 2014),
- and other issues, such as sustainability education.

The authors of this article divide sustainability knowledge into three main areas, which are reflected in the publications listed in a-g above:

- sustainability knowledge on the state and development of environmental and social threats,
- sustainability knowledge about the impact of environmental and social threats on the Earth and its inhabitants,
- sustainability knowledge showing how to counteract environmental and social threats.

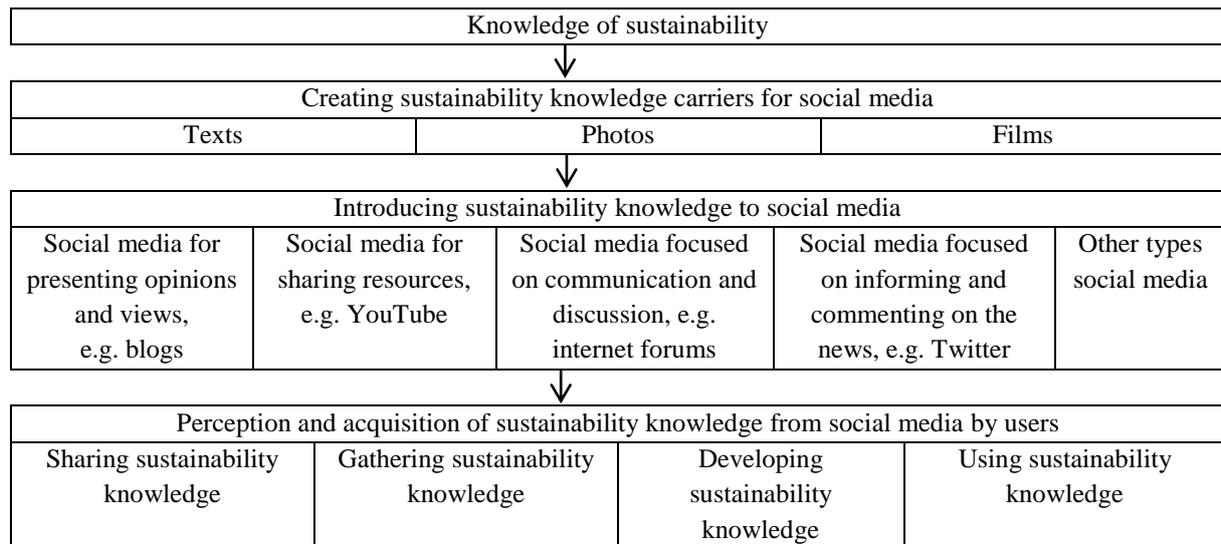
The first important area (a) is the knowledge on the state and severity of environmental threats (the depletion of non-renewable natural resources, pollution of the atmosphere, soil and water, the decline of biodiversity and others) and social threats (social diseases, exploitation, poverty and deprivation, unemployment, excessive consumerism and others). These threats worsen the state of the Earth, reduce its potential and adversely affect the societies that inhabit it.

The issue of the negative impact of these threats on the environment and humans falls under the second knowledge area (b). Here are some examples of such impacts. According to research, the reserves of elements such as iron, lead, copper and gold will only last for a dozen to several decades. Oil reserves, which are easily accessible and inexpensive to exploit, will run out in about 20-30 years. The upper layers of the atmosphere are polluted by chlorofluorocarbons, which contributes to the formation of the ozone hole and increases the penetration of harmful ultraviolet rays (Steffen et al., 2015).

The manifestation of soil pollution is the acidification or alkalinisation of soils, as well as the accumulation of pesticides, nitrites and organophosphorus compounds. More than three-quarters of the Earth's entire land surface has already been degraded, and this figure could rise to as much as 90 per cent by 2050. The supply of clean drinking water is dwindling in many parts of the world. By 2025, it is predicted that up to two-thirds of people will live in areas experiencing severe water shortages. From 1970 to 2014, the world's vertebrate population declined by an average of 60% and the population size of freshwater species decreased by 83% (Brzozowska et al., 2021). Hundreds of millions of people worldwide suffer from social diseases. An example is diabetes. Already today, around 422 million people worldwide have diabetes. It is estimated that this number will more than double in the next 20 years. (Koprowska, 2019). There are 21 million victims of forced labour worldwide resulting from human trafficking, slavery, bonded labour and prostitution. They generate 150 billion USD in illegal profits (Jeanrenaud et al, 2017).

In order to eliminate or reduce the negative human impact on the environment and to solve social problems, knowledge indicating how to do so concretely is necessary (c). This includes shaping people's pro-environmental and pro-social attitudes, using sustainable products and services, doing work and other activities in a sustainable way (Brzozowska et al., 2021).

Let us move on to the model approach to the management of sustainability knowledge on social media. The essence of our approach to this problem is reflected in Figure 1. Its starting point is the knowledge we discussed above. The first step in managing the sustainability knowledge thus defined is to create carriers of this knowledge for the needs of social media. These carriers mainly take the form of texts, photos and videos. They should be introduced to all types of social media listed in Figure 1. This will ensure that sustainability knowledge reaches a large audience.



**Figure 1.** Management of sustainability knowledge on social media - a model approach.

Source: authors' own elaboration.

The sustainability knowledge posted on social media will reach the users of these media, including young people. The perception and acquisition of this knowledge can range from a very superficial approach to a deep approach consisting in penetrating its details. This is determined by the ability of messages about sustainability posted on social media to capture the attention of the recipient. Such messages should interest the viewer with their content and appearance. An interesting and attractive message is bound to elicit positive reactions: it will prompt the recipient to spread the knowledge among his or her friends, and may also encourage him or her to expand this knowledge. If a social media user is particularly interested in some content on sustainability or needs it to achieve a specific goal (e.g. write a paper, prepare a presentation), he or she will start to collect such content (save it in folders, copy it to notes). There is another very important aspect of the impact of sustainability knowledge posted on social media on the audience: such knowledge should encourage the recipient to apply it practically in everyday life. It should inspire the recipient to take pro-environmental and pro-social actions. Only knowledge combined with concrete actions can accelerate sustainable development.

In order to delve deeper into the problem regarding the young generation's response to sustainability knowledge gained from social media, the authors of this article carried out a qualitative study, the description and results of which are presented in the following sections of this article. It explains to what extent social media are useful in managing the sustainability knowledge of the young generation and how it can be improved.

## 4. Research method

The aim of the study was to determine the role of social media in the acquisition, development, use and dissemination of sustainability knowledge by the young generation. In order to achieve the objective formulated in this way, a research plan was prepared, the study was carried out according to this plan, the collected information was analysed and conclusions were drawn.

The study used the focus group method. This method involves the creation of focus groups of 4-12 people, who conduct a focused discussion on a specific topic under the guidance of a moderator. The focus method was chosen by the authors of this article because it has a very important advantage: it allows access to information that is inaccessible by other research methods. Focus groups reveal not only what research participants think, but also why people think a certain way (Barbour, 2011).

In order to conduct the focus study, a scenario was drawn up. The scenario included the following: the subject and purpose of the interview, participants of the meeting, conduct of the meeting. The 'Conduct of the meeting' section of the script lists the five stages described below.

- Stage 1 Introduction.
- Stage 2 Discussing the rules of the meeting by the moderator.
- Stage 3 Proper discussion.
- Stage 4 Summary of the proper discussion.
- Stage 5 Conclusion.

Stage 1 consisted of the following activities: welcoming the participants of the meeting, introducing the moderator, informing them that an attendance list had been drawn up, outlining the objectives of the meeting, presenting the stages of the meeting, explaining the concept of 'sustainability knowledge' and the concept of 'social media'. In stage 2, the moderator set out the rules for the discussion and explained how the information collected from the participants would be used. In the part of the scenario identified as Stage 3, 15 open-ended questions were listed, which properly guided the discussion and enabled the research objectives to be achieved. Stage 4 was the moderator's summary of the discussion. Stage 5 was the conclusion of the meeting, which included thanking the participants for their participation in the study.

The study covered four focus groups, consisting of students from the Z generation.

## 5. Results

The initial part of the study discovered how the participants of the conducted focus studies use social media. The study found that all the informants use social media. They use the following media: Facebook, Instagram, YouTube, TikTok, Snapchat, WhatsApp, Messenger, Twitter, and Twitch. The most popular among them are: Instagram, Facebook, and YouTube. TikTok is becoming increasingly popular.

All the informants access social media via mobile phones, mainly smartphones. This is because, as they claim, *the smartphone is at hand and always with you. Even when I'm on the move, I look at it somewhere along the way; first of all, it's convenient and we're used to it because we use the phone every day and go on social media every day. We don't often have a computer with us, so we instinctively pick up the phone* Another informant adds: *even if I have my computer on and I am doing something on it, when it comes to social media I only use my phone*. Some of the people surveyed also identified other devices that they utilise when using social media, but they only do so while at their place of residence. These devices are: laptop, tablet, desktop computer, and TV with internet connection. Outside the home, they all only use mobile phones, mainly smartphones.

The majority of the informants stated that their maximum use of social media per day is between 5 and 6 hours per day. Few indicate less activity of 2 to 3 hours per day.

The informants revealed that their social media use increases at weekends, while it decreases on holidays and during family celebrations. They justified it as follows: *at weekends it's definitely longer because there's no work, there aren't as many responsibilities as during the week*. In addition, *at the weekend it happens that you catch up on the use of media that appeared during the week, so this time at weekends extends to three to four hours*. During holidays and family celebrations, the social media activity of the informants is definitely lower because, as they say, *holidays are for family, not for media*. At weekends, they use media until 8 pm because, as they add, *later you spend time with friends and your phone is in your pocket, you don't spend time on your phone*.

The next main part of the study revealed if and how the young generation obtains, develops, collects, uses and disseminates sustainability knowledge using social media.

All the respondents unanimously answered that they encounter content on environmental protection, social issues and sustainable development on social media at least once a week. Nevertheless, the frequency that this content appears is determined by their type of online activity and personal interests. Encountering content related to sustainability depends on what the respondents are interested in (what or who they follow on social media). According to one informant, *I come across such content almost every time I visit Instagram or Facebook. Either it's pages I've liked or some featured ads, based on what I like*. Contact with content regarding sustainability largely depends on whether a young person is interested in sustainability.

One survey participant put it this way: *I'm rarely get these things because I'm interested in other things on social media.* Thus, the development of sustainability knowledge gained from social media depends on the young person's interests. If they are interested in the issue, they will seek further information on it.

According to the statements of the respondents, the content related to sustainability posted on social media is mainly of a pro-environmental nature, while that dealing with social issues is less frequent. Here is an example of an informant's statement: *There's this boom on social media for environmental content, then it disappears and in a while we get it again because some people focus on protecting the natural environment and making other followers aware. It comes back again and it's all over the place.* In support of their words, the informants indicate the content they encountered on social media in the last week preceding the focus study. Their statements are quoted below.

- *Such posts are often shared on Instagram, for example, the model Joanna Krupa does it.*
- *On Instagram, I very often come across posts of the actress Julia Wieniawa. Now she has opened her own clothing company called LEMISS. They are sports clothes for yoga and are actually made of recycled materials. The shipping and packaging are also very environmentally friendly because you can put a few of these clothes in one such small package. Also on TikTok, I very often see things promoting freeganism, i.e. collecting things that are fit for use from the bin or from the rubbish and that it is better to buy second-hand clothes, e.g. in second-hands rather than the Shein chain.*
- *I even came across something like that this morning. I found out that because of the pro-environmental actions of countries like China and India, the Earth is greener than it was 20 years ago, in other words, things are moving in a fairly good direction, positively.*

Few informants use specialised social media dedicated solely to environmental protection, social problems and sustainable development issues. One informant said: *This is where WWF Poland comes to mind. I follow them on Instagram and on Facebook, so that's such a source that is dedicated to this topic. Sometimes, when they have an interesting article from which only an excerpt is given, I go to their website where the content is more extensive. I also happen to watch [National]Geographic Channel.* Other informants are aware that specialist social networking sites focusing on sustainable development issues exist, but they do not access them, justifying this by their lack of English language skills. Here is an example of a statement: *I don't use it because it's mostly some English-language content, and my English is average, so I rather listen to Poles who talk about it.*

The informants also indicated important elements that must be present in the message to arouse their interest and encourage them to read. It is primarily the title that arouses curiosity and interesting graphics. The informant emphasises that *if something is pleasing to the eye, we automatically click on it, and if it is unsightly, we skip it and don't read it.* The authenticity

of the presented content is also important, e.g. photos should be real and not altered by processing in computer programmes.

The respondents claim that a very important element of the message regarding sustainability is who it comes from. According to one informant: *If it is, for example, a video on YouTube, I have my specific creators and I know by the name whether I want to watch it. As an example, Jordan Peterson's lectures give me a much bigger view and a deeper understanding, so I can shape my views better.* Equally important is the credibility and professionalism of the source because, in the words of one informant, *when I'm going to read, I also look at who the author of it is, in the sense that it's not some Onet, or Interia (popular Polish portals), or some gossip, but the point is that the website should be clear and transparent, credible and competent.*

The majority of the people surveyed admit that even if they read content related to sustainability, they do not comment on it on the Internet. According to an informant, *there must be a very provocative post to comment on it.* Another informant complements the statement of the predecessor of the discussion as follows: *I definitely get acquainted with environmental content, but I shy away from commenting, I tend to be a passive listener, and I am mainly encouraged to watch such content by the name of the creator and the presented content.* The respondents do not collect information in the field of sustainability that they encounter on social media.

Almost all the people surveyed feel the need to share the content obtained on social media with other people, family, and friends. They do this mainly through social media. An informant explains: *When I come across an interesting post, I forward it on to my friends so that they can take a look at it.* Her colleague adds: *If I share, it's through Messenger or I forward it on Instagram.* Some informants share knowledge gained from social media while being in direct contact with their interlocutors (*face to face*). This is especially the case when the interlocutors are elderly people who do not have IT devices, do not know how to use them or do not have access to the Internet.

Nearly all the informants emphasised that it was the content found on social media that made them more interested in the issues of sustainability, considering this content important and necessary. Social media inspired most of the respondents to take various pro-environmental and pro-social actions to implement the principles of sustainability in their daily life practices. Examples of the informants' statements are presented below.

- *I've generally been trying to avoid eating meat for five years now, mainly for environmental reasons, precisely thanks to the content I've found on the internet, or for example, I buy clothes from second-hands, sources that don't support consumerism.*
- *Posts remind us to act according to the principles of sustainability. If, for example, we see that there is a water shortage in Africa, it makes us aware that we should respect water and, let's say, we brush our teeth - we don't leave the tap turned on all the time - but we try to take care not to waste water. The same goes for segregating rubbish or feeding animals in zoos, we try to act according to these principles.*

- *I, thanks to the fact that I started reading such content in the media, have stopped using plastic shopping bags, I just take reusable bags with me. It's the same with plastic straws. Turtles were in the news. When I saw the material, it was about turtles, that turtles suffer a lot. I watched such horrible footage of these straws being pulled out of these turtles' nostrils, so I haven't used them since.*
- *I personally try to save water because of the fact that water prices are rising, the water supply is decreasing and I have read a lot on the internet about water shortages and not somewhere far away in Africa, but already here, e.g. in the Lodz area there is a problem with water and it will be the biggest problem in the future.*
- *I, for example, use reusable cups, I have such a thermal cup here for tea and I also have one made of such thick plastic for various cold drinks; when I go somewhere, I take this cup with me rather than buying disposable ones.*
- *I have been inspired in my daily life not to throw food away but to leave it for the next day or make something else out of it. I make sure that when I brush my teeth I pour water into a cup and not run the water all the time.*
- *I recently came across a profile on Instagram of my technical school friends and they came up with this method of using old bedding, old sheets to sew new clothes, which they later sell. So it's using old materials that could be thrown away to be transformed into something completely new.*

Some of the young people taking part in the survey believe that despite their knowledge of environmental and social threats gained through the media, they do not have the opportunity to use this knowledge to take action on a large scale. In their view, as individuals they have little influence and too little power to bring about positive pro-environmental and pro-social changes in their environment. They believe that adequate capital and appropriate prestige and social status are needed to bring about such changes.

When asked what actions should be taken to make social media more useful in spreading knowledge on environmental protection, social problems, and sustainable development, all the informants unanimously point to the need to disseminate this content in the family and at school in the process of educating the young generation: *Parents and teachers should make young people aware in face to face manner, so that later these people can find this content for themselves on the Internet. To sow the seed so that young people want to continue down this path and keep looking for this content on social media.* In their opinion, it is also important to use local authorities and celebrities to promote sustainability knowledge and to make sure that the media have a clear and attractive message.

*I think maybe it would be a good idea to encourage the most popular creators, mainly from the entertainment area, because entertainment is the most searched for and received form of communication on social media, to encourage creators to promote this content so that more people can access it and maybe arouse interest in them.*

*To make some kind of challenge on social media, like the website Reddit for example. I mean that celebrities who exist on Facebook, media, TikTok create such a challenge that promotes sustainable development.*

*Celebrities have a big impact in the media, it is a ripple effect, it reaches everyone, if they start talking about it more loudly, different portals start writing about it, because it is known that it's a hot topic and then such a snowball effect will dominate, it will spread and the algorithm will want to distribute as much of this content as possible to more people.*

It is also important, according to the informants, that the content posted on social media is easily digestible, accessible, understandable, not overloaded with facts and served in an aesthetically pleasing way. This is because, as they say, *young people often watch videos because they are easy to understand, you don't have to concentrate very much, and I believe these videos should show situations that really happen in polluted areas, where, for example, an animal is entangled in nets or nets left behind, and younger people will care about something like that because they like animals and don't want them to get hurt, and it might inspire them not to produce waste.*

The informants also emphasise that *there should also be prepared content, pictures for children who use technology and look for games, for example, because if there is a lot of text, it is bad, because children are not interested in reading five-page long texts, but a graphic version. Some themed competitions with prizes, such as eco bags, are also a good thing.*

The conducted research uncovered important facts about the role of social media in managing the sustainability knowledge of the young generation.

## **6. Discussion**

In the discussion, we refer to some of the conclusions and opinions of the researchers listed in the Literature Review of this article, and we also present our own opinions.

We agree with Giovanni Sogari, Tommaso Pucci, Barbara Aquilani, Lorenzo Zanni that social media is playing an increasingly important role in the sphere of sustainability. Relating their research to the wine sector, they found that social media increases awareness of sustainability and influences consumer purchasing behaviour. Our study confirms these findings, although it is much broader and not focused on the wine sector. We take into account all the pro-environmental and pro-social activities that young people can carry out under the influence of social media. The consumer behaviour of purchasing sustainable products and services is just one type of this.

Social media, according to A. Jesu Kulandairaj, influence the lifestyle of the youth. We believe that this lifestyle can be divided into two types: a sustainable lifestyle and an unsustainable lifestyle. Thus, social media also have an impact on shaping a sustainable lifestyle for young people.

The research by Maria Teresa Ballestar, Miguel Cuerdo-Mir, Maria Teresa Freire-Rublo shows that obtaining information on sustainable development from social media through listening is very important. In our opinion, this listening will be even more effective if it is complemented by content that also interacts with the visual sense. This is why we believe that verbal messages should be supplemented in social media, where possible, with photos, videos and graphics. They will certainly reinforce the message and make the recipient remember it longer. The authors mentioned above focused their research on Twitter. We consider the acquisition of knowledge about sustainability in the broad context of multiple social media.

Referring to the findings of James A. Swaim, Michael J. Maloni, Stuart A. Napshin, Amy B. Henley, we believe that the traditional teaching of sustainability must be complemented by the transfer of knowledge to the young generation via social media. Young people use social media extensively. Sustainability knowledge conveyed through social media should be an important complement to traditional education. It will contribute to the formation of pro-environmental and pro-social attitudes and inspire youth to take actions in the sphere of sustainability.

A continuation of the study, the results of which are presented in this article, is desirable. We suggest that each of the key processes of managing the young generation's sustainability knowledge gained from social media should be explored more broadly and in more detail. Separate extensive studies could be conducted on issues such as the acquisition, collection and development of such knowledge, as well as its dissemination and use.

## 7. Conclusions

Social media are very popular among the young generation. Young people use different channels of social media. They devote a great deal of time to media every day, usually several hours. The most frequently used include: Facebook, Instagram, YouTube, Snapchat, WhatsApp, Messenger, Twitter, Twitch, and TikTok. Social media have become a part of young people's lives and using them has become a habit. Social media distract them from books, newspapers and magazines. The dissemination of sustainability knowledge via social media is therefore fully justified. This type of content should be posted on social networking sites.

Social media activity among Gen Z youth increases on weekends and decreases during annual holidays and family celebrations. From this, it follows that the most content in the field of sustainability should be posted on normal work and study days and at weekends. During the

holidays, less new sustainability content can be introduced as young people spend time in real life with their families then.

Young people are more likely to encounter content on social media relating to environmental issues, but are less likely to encounter content relating to social issues. They rarely use specialised sites dealing exclusively with sustainability issues.

As the study has shown, it is the information contained in social media that prompts young people to take an interest in the issue of sustainability and causes them to consider it important and necessary. The growing interest in sustainability issues makes young people start to deepen their knowledge in this area.

In order to arouse greater interest in sustainability issues among young people, the attractiveness and design of this type of social media content needs to be improved. The young generation requires content that is easy to understand, digestible and not overloaded with facts. The authenticity of the presented content, a title that arouses curiosity and interesting graphics are important. The impact of sustainability messages grows significantly if they are conveyed by well-known actors, artists, filmmakers and celebrities. All of this has an impact on a young person's willingness to share sustainability knowledge with their family, colleagues and friends.

Special campaigns on sustainability attract the attention of the young generation. An example of this is the Trashtag initiative. Its aim is to motivate Internet users from all over the world to protect the environment and the landscape and to publish 'before' and 'after' photos. For example, one photo shows a littered area and another shows the same place that has been cleaned up. There should be more such campaigns on social media to mobilise young people to take up pro-environmental and pro-social activities. As the study showed, young people do not always put sustainability knowledge into practice in their everyday lives. For many of them, the inspiration for such actions comes from extraordinary situations publicised on social media, e.g. a tragedy resulting from an anti-environmental or anti-social activities.

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