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The Role of Social Interaction and Personal Characteristics in Affecting the Adoption of Compost from Organic Fraction of Municipal Solid Waste in Italy

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Abstract: The composting process allows one to minimize quantities of the organic fraction of municipal solid waste (OFMSW) disposed through landfills. Compost obtained from OFMSW is not yet widespread across all European countries, including Italy. Even though previous studies emphasized the role that social interaction and socio-demographic users' characteristics may have toward the adoption of sustainable practices, to our knowledge, few studies have specifically addressed OFMSW compost. Considering the need to integrate the social perspective in sustainable agriculture literature, further research is required regarding the intention to adopt this organic product, especially among potential users. A questionnaire was used to investigate potential users' level of interest in using OFMSW compost and their a priori perceptions on its fertilizing properties, if anyone ever suggested using OFMSW compost, as well as the participants' socio-demographic characteristics. Fifty-eight participants were involved. The results demonstrated a significant association between education level and received suggestions from peer or social networks in the interest of adopting OFMSW compost. In addition, participants who received suggestions had higher odds of being highly interested in adopting OFMSW compost versus those who did not receive it. In conclusion, institutions, where formal knowledge has a place, and agricultural policy makers should be engaged with the aim to facilitate knowledge exchange and connections among different actors, supporting local-level initiatives.

Keywords: compost; municipal solid waste; adoption determinants; social factors; circular economy; sustainable development goals

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1. Introduction

Management of the organic fraction of municipal solid waste (OFMSW) is one of the most relevant environmental issues worldwide [1,2]. Indeed, an average of 2.01 billion tons of OFMSW were produced in the world in 2018, and quantities are expected to increase in future years, reaching 3.40 billion tons by 2050 [3], especially in the developed countries. The available statistics reported that in 2018 in the United States a total of 292 million tons of OFMSW were produced [4], and in 2019, in the 27 EU Member countries, an estimated quantity of 225 million tons of OFMSW was generated [5]. Concerning the OFMSW management, at present, in the US nearly 146 million tons of OFMSW were landfilled, 35 million tons were incinerated, approximately 69 million tons were recycled and 25 million tons were composted [4]. Whereas, in the 27 EU States about 54 million tons of OFMSW were disposed through landfill, 60 million tons were incinerated, whereas 107 million tons of OFMSW were recycled and/or composted [5]. With regard to the Italian context, the OFMSW produced in 2019 amounted to about 30 million tons [6], that is more than 10% of all the OFMSW produced by EU-27 countries. Nevertheless, the recent data available highlighted that compared to previous years, Italy has reduced the tons of OFMSW destined for landfills and, on the other hand, the percentage of OFMSW recycled and/or composted has increased [7]. The organic fraction is the most collected waste fraction in Italy, representing 39.5% of the total waste from separate collection [7]—which includes food waste, kitchen waste, leaf, grass clippings, flower trimmings and yard waste [8]. From this amount of organic fraction, approximately 1.7 million tons of soil improvers are produced per year of which nearly 1.2 million tons (72.4%) resulted from the composting process and over 457 thousand tons (27.6%) resulted from the integrated anaerobic/aerobic treatment [7]. Furthermore, according to the data reported by the Italian statistical office (ISTAT) [9], the increase in using bio-waste compost was impressive, rising more than 58% since 2014.

Overall, for both social, economic and environmental reasons, countries have to minimize the OFMSW disposal through landfills and find methods to convert waste into new reusable materials [10]. Thus, the huge amount of OFMSW should be recycled and/or composted, as also promoted by the 2030 Agenda for Sustainable Development, which provides urgent calls for action to achieve a better prosperity and more sustainable future for people and for the entire planet. In line with these 2030 Agenda future goals, the "Zero Waste" philosophy and the "Circular Economy" paradigm had already encouraged the redesign of resources and the life cycle of the products [1,11]. Following this concept, products, at the end of their life, should not be considered as a waste and, consequently, sent to landfills or incinerators but should be processed and treated as becoming input for new products in a metabolic circular process [1,12]. Similarly, organic waste could not be considered as an issue, but rather as a new form of resource [13] Composting of OFMSW and using compost for agricultural purposes is a quickly growing and viable method to manage OFMSW in both developed and developing countries [14].

In detail, the composting process of OFMSW may support the task of achieving many different SDG goals, such as SDG 11 (sustainable cities and communities—as municipal waste management allow one to minimize the adverse impact on the environment and health by reducing the survival and spread of pathogens in waste sent to landfill), SDG 12 (responsible consumption and production—the reduction of food loss and waste can reduce production costs and can increase the efficiency of the whole food systems) and SDG 13 (climate action—as composting can reduce toxic air pollution and greenhouse gases emission) [15]. Moreover, in accordance with the paradigm of the circular economy, the end product obtained from OFMSW, thanks to its agronomic value, could be reused as a soil fertilizer or conditioner to improve the soil organic matter content, reduce soil degradation and substitute the more costly chemical fertilizers [12,16–19]. However, its safe use in agriculture depends on the production of good quality compost, typically, compost that is mature and sufficiently low in heavy metals content [20]. In addition, the application of the obtained compost in the agricultural soils may support the achievement of some other SGDs, such as the SGD6 (water and sanitation) and SDG 15 (life on land). Indeed, compost, which is known for its ability to improve the water retention capacity of soils, can help to enhance the efficiency of water use from the agricultural point of view and help to restore degraded soil and land [13]. As a consequence, compost adoption can also positively affect Goal 2 (zero hunger) promoting sustainable agriculture.

Despite all these relevant benefits derived from compost application in terms of improvement of soil quality and fertility, reduction of soil erosion and bioremediation of polluted soils [21], the adoption of compost made from OFMSW is not yet widespread across all European countries, including Italy, as many users still associate this material with environmental and health hazards [22]. Moreover, people may not be sure about the fertility, and/or toxicity of the fertilizers recovered from OFMSW and refuse to apply them in their fields. Indeed, some of the main factors that may affect people's adoption of compost-based organic fertilizers are the uncertainty related to the lack of the nutrient content information and perceived superior profit of applying composting fertilizers compared to chemical fertilizers [22,23]. In addition, as highlighted by Lupton [24] and Casa et al. [25], different various actors (e.g., agricultural organizations, retail and food industries and national policies) and a number of factors (the majority of these are demand-side factors, e.g., factors affecting the users' attitudes towards a product or their capacity to use it) affect users' decision-making process in organic fertilizers' adoption.

Furthermore, previous studies also pointed out that a variety of social aspects and socio-demographic characteristics may have a key role in enhancing the sustainable development [26] and in the diffusion of new innovative farming practices and products [27] and technologies [28–31] among potential users. Generally, a multi-actor knowledge network consisting of interactions between informal and formal sub-networks may be relevant. In rural contexts, the formal knowledge network consists of universities, research institutes, advisory services and farmers' organizations, whereas an informal knowledge network includes those sources of knowledge that are generally part of the farmers' daily routines, such as community ties, family and personal relations, neighborhood associations or peer groups [26]. Farmers tend to preferably rely on this latter type of social knowledge and learning as reflecting the interconnectivity between dynamic local conditions, which allows farmers to respond and adapt to them. Indeed, informal knowledge generated in local contexts considers the complexity of the realities in which farms operate and integrates several dimensions (e.g., environmental, economic, social, financial and technical dimensions) [26].

An increasing number of studies agree on the positive effect that peers, and other people who are in the user's social networks (intended as family members, neighbors and users with experience, as reported in Talukder and Quazi [30]), have on the decision to adopt more environment-friendly practices [32–34]. This effect could be explained as a consequence of receiving information, sharing experiences and learning from peers and/or imitation among neighbors and peers [35]. In detail, according to Oster and Thorton [36], in any adoption process, the peer's effects work in three major ways: (1) individuals take advantages from acting similarly to friends and/or neighbors; (2) individuals increase their knowledge of the benefits of the technology from their friends; and (3) individuals learn about how to use a new approach from peers [37].

The majority of studies emphasizing the importance of social factors among potential adopters of sustainable practices were conducted in the agricultural setting and investigated the role of peers and social network in the adoption of practices, such as crop rotation, soil and water conservation practices, organic fertilizer adoption [38,39], conversion to organic agriculture [40,41] and the adoption of digital technology [27,36,41]. On the other hand, the socio-demographic factors, such as gender, age and level of education, were detected as relevant in analyzing the adoption of innovations and technologies in farming activities [26,42]. However, the majority of studies specifically addressing compost obtained from OFMSW have been undertaken in different developing and emerging countries, such as Cameroon [43,44], Nigeria [45], Ethiopia [46] and Thailand [47], with very few in developed countries [48] where studies rather focus on social factors influencing household waste separation [49]. In addition, Dahlin et al. [50] recognized that the perceptions and preferences of non-farmers toward organic amendments have received little attention from researchers. The research group in their study investigated the perception and purchasing preferences of compost among groups of German private gardeners, pointing out that educational level may also affect the decision to purchase specific soil amendments in this group of users.

Based on this, further research is required, as broadening the market of compost among all types of potential users (both farmers and non-farmers) would contribute to a sustainable solution for waste management and replace non-renewable and more expensive chemical fertilizers. Moreover, considering the need to integrate the social perspective in sustainable agricultural literature [51], we believe that a better understanding of factors affecting the decision-making process and the interest in use of potential users regarding the utilization of this specific compost is needed. In detail, a deeper understanding of what positively supports the current users' perceptions of compost is relevant in correcting or strengthening the users' knowledge network.

It is especially true if considering that in Italy the compost product is mostly used for agronomic and horticultural purposes (around 70% of whole composted material produced), followed by gardening and landscaping purposes (the remaining 30% of compost produced). In particular, according to previous available data about the potential use of compost in Italy, despite the great quantities of compost used in farming activities, agriculture represents the sector with the most significant potential market, though currently including only 13% of the market share [52].

In light of the available evidence, the present research aims at: (i) understanding the intention to use compost obtained from OFMSW among potential users, (ii) identifying which users' personal characteristics can influence intention to use OFMSW compost as soil amendment, and (iii) investigating the role of social interaction (i.e., the peers and people who belong to users' social network) upon this decision-making process.

2. Materials and Methods

2.1. Participants

Participants in the present investigation were recruited among the visitors of the 24th "Ecomondo" Green Technology Expo, which took place in Rimini (Emilia Romagna Region, Northeastern Italy) from 3 to the 6 of November 2019. The "Ecomondo" exhibition is an international fair, one of the biggest European green and circular economy exhibitions, focused on the reuse of raw materials, energy and sustainable development, with more than 100,000 visitors every year. Though recruiting participants during such events may lead to a self-selection bias, these exhibitions represent the best occasions to have access to a large and wide-ranging group of participants from across Italy. Therefore, such events represent a suitable place to perform survey investigations and quantitative data collection [53], considering our target population consisting of potential users of compost from the organic fraction of municipal solid waste, in particular. Indeed, as a prerequisite to be recruited, participants needed to be familiar with this specific type of compost. Respondents were selected exclusively among Italian visitors. Considering the potential of the farming and the hobbyist market, both the categories of respondents were considered to be recruited in the present investigation [54,55].

No incentives were offered to participate in the survey. All participants gave their consent for inclusion before they participated in the study.

2.2. Instruments

A paper-and-pencil questionnaire was administered to the participants. The questionnaire was handed out to the visitors of the exhibition by trained research assistants. The assistants explained the aims of the study, provided a definition of compost from OFMSW and informed the participants that the questionnaire was anonymous. The questionnaire was in Italian and it took approximately 5 min to be filled in. The questionnaire was designed to address current adopters of compost from OFMSW and potential users (non-adopters). At the beginning of the questionnaire, the actual use of compost from OFMSW was assessed; based on this, a dichotomous path was followed. In the case of non-adopters, only those who reported to know what compost from OFMSW was continued with the survey. Afterwards, interest in the adoption of compost from OFMSW was assessed by asking participants how much they were interested in using compost from OFMSW on a 4-point rating scale (from 1 = not at all to 4 = very much).

In the next section, factors encouraging adoption of compost from OMSW among potential users were investigated; in particular, participants were enquired about their a priori perceptions on fertilizing properties of compost from OFMSW, asking whether, in their opinion, it is a complete or partial substitute of other fertilizers.

Finally, participants were asked if anyone (namely peers, family members, neighbors, consultants or any users with farming experience) ever suggested using compost from OFMSW. A standard socio-demographic form followed to collect information about personal characteristics of the respondents: gender, age, education and occupation.

2.3. Data Analysis

In order to perform data analysis, some scores were aggregated and records deriving from open questions were classified. In detail, the item "profession" was coded into two main categories: "professionals", including farmers and gardeners who could have interest in adopting compost because of their job and are supposed to be more prepared on the characteristics and uses of compost from OFMSW, and "hobbyists", including all those who do not work in the sector but could potentially be interested in adopting compost when practicing gardening, horticulture or just farming as a hobby.

Similarly, also based on literature the variables "age" and "education" were made dichotomous, and thus the participants were divided by under/over 50 (in order to detect differences among 'younger' and 'older' [56,57]) and by those with "medium-low education level" (below bachelor's degree) or those with "high education level" (with bachelor's degree or higher educational qualification).

To analyze and record the relationship between the variables investigated and the participants' propensity in using compost from OFMSW, the level of interest in adopting compost was coded as "low" when they reported to be poorly interested or not at all interested (score 1 or 2) and "high" when they reported being interested or strongly interested (score 3 or 4). Descriptive statistics were computed for all the variables of interest. Then, contingency tables and non-parametric Chi-squared tests were performed to indicate significant results. Finally, the significant variables were modeled into a binomial logistic regression to ascertain their joint effect on the likelihood that participants are interested in adopting compost from OFMSW.

The *p*-value for statistical significance was set at $p < 0.05$ and all the statistical analyses were conducted using IBM SPSS Statistics 26.0 (IBM, Armonk, NY, USA).

3. Results

A total of fifty-eight participants were included in the present analysis; most of them were male (79.3%) and the overall mean age was 39.7 years (SD = 12.1)—those under 18 years were excluded from the analysis. With regard to the educational level, 34 participants (58.6%) reported to have at least a bachelor's degree or higher education qualification (e.g., Masters post lauream or PhD). With regard to occupation, participants were almost equally distributed into "professionals" (51.7%) and "hobbyists" (48.3%).

Table 1 illustrates the crosstabs used to present the data of main socio-demographic characteristics in relation to participants' interest in using compost from OFMSW. The majority of them (63.8%) reported high interest in using it, but this percentage varied within socio-demographic characteristics. In particular, the Pearson Chi-Square test pointed out a statistically significant association between education level and interest in adopting ($\chi^2(1) = 5.717$, $p = 0.017$). In detail, a significant number of participants reporting high interest in adopting compost from OFMSW (70.3%) have a high educational level with at least a bachelor's degree (Figure 1).

Table 1. Interest in adoption by main socio-demographic characteristics of participants.

Variables	Levels	High Interest in Adoption *n* (%)	Low Interest in Adoption *n* (%)
Gender	Male	27 (73.0%)	19 (90.5%)
	Female	10 (27.0%)	2 (9.5%)
Age	<50	28 (75.7%)	17 (81.0%)
	>50	9 (24.3%)	4 (19.0%)
Education	Medium-low level	11 (29.7%)	13 (61.9%)
	High level	26 (70.3%)	8 (38.1%)
Profession	Professionals	17 (45.9%)	13 (61.9%)
	Hobbyists	20 (54.1%)	8 (38.1%)

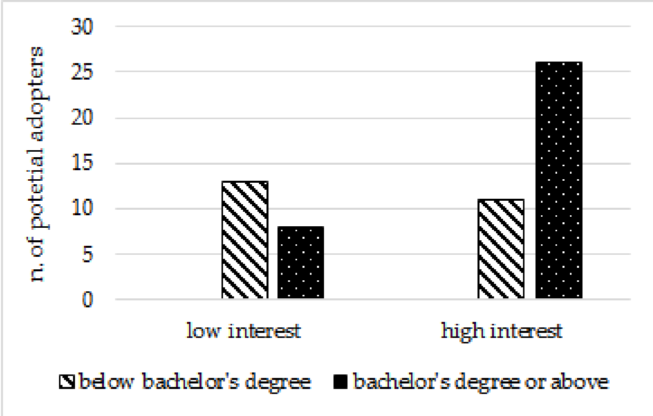

Figure 1. Interest in adopting compost from OFMSW and education level.

Table 2 illustrates the crosstabs of participants' interest in using compost from OFMSW in relation to a priori perceptions on fertilizing properties and eventual suggestion received by their peers (family members, neighbors and consultants). Pearson Chi-Square test pointed out that a high interest in adopting compost from OFMSW is significantly affected by having received any suggestions from peers or social networks ($\chi^2(1) = 8.678$, $p = 0.003$) (Figure 2). On the other hand, perceived properties and interest in adoption were not statistically associated.

Table 2. Interest in adoption by perceived properties of compost from OFMSW and peers' suggestions.

Variables	Levels	High Interest in Adoption *n* (%)	Low Interest in Adoption *n* (%)
Perceived properties	Completely replaces other fertilizers	9 (24.3%)	3 (14.3%)
	Partially replaces other fertilizers	28 (75.7%)	18 (85.7%)
Suggestions from peers or social networks	Yes	27 (73.0%)	27 (73.0%)
	No	10 (27.0%)	14 (66.7%)

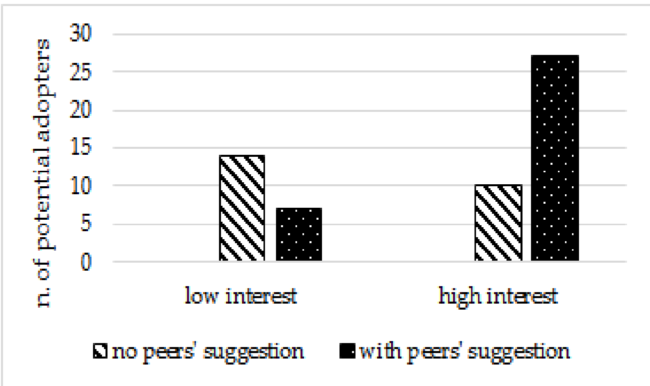

Figure 2. Interest in adopting compost from OFMSW by peer suggestion.

The logistic regression model, computing together all the considered variables (gender, age, education, profession, perceived properties and peers' suggestions), was statistically significant, $\chi^2(6) = 13.842$, $p = 0.031$ (Table 3). The model explained 29.1% (Nagelkerke R^2) of the variance in the interest of adopting compost from OFMSW and correctly classified 74.1% of cases. The sensitivity of the model was 83.8%, specificity was 57.1, the positive predictive value for high interest in adopting compost was 77.5% and the negative predictive value for low interest in adopting compost was 66.7%. When all personal and social factors were included in the logistic regression model, only the association with peer suggestion remained a significant predictor (p = 0.016) with an increase in the odds ratio (Table 3). Indeed, participants who received any suggestion from peers or social networks about compost from OFMSW had 5.2 times higher odds of being highly interested in adopting compost than those who did not receive it.

Table 3. Logistic regression predicting likelihood of being interested in adoption of compost from organic fraction of municipal solid waste based on level of education and peers' suggestion.

Variable	B	SE	Wald	df	p	Odds Ratio	95% CI for Odds Ratio	
							Lower	Upper
Gender	−1.067	0.959	1.239	1	0.266	0.344	0.053	2.252
Age	0.054	0.783	0.005	1	0.945	1.055	0.227	4.894
Education	0.753	0.706	1.136	1	0.286	2.124	0.532	8.481
Profession	−0.111	0.698	0.025	1	0.873	0.865	0.228	3.511
Suggestion from peers or social networks	1.642	0.685	5.752	1	0.016	5.165	1.350	19.759
Perceived properties	0.678	0.873	0.604	1	0.437	1.971	0.356	10.911
Constant	0.074	1.066	0.005	1	0.945	1.077		

Note: "Gender" is for males compared to females. "Age" is for >50 compared to <50. "Education" is for higher education (bachelor's or above) compared to medium-low education. "Profession" is for hobbyists compared to professionals. "Peers' suggestion" is for having received any suggestion compared to never having received it. "Perceived properties" is for "completely replaces other fertilizers" compared to "partially replaces other fertilizers".

4. Discussion

The present study aimed to understand whether potential users' personal characteristics, such as gender, age, level of education, profession and social interaction with others (i.e., peers, family members, neighbors and consultants) can affect the likelihood of being interested in adopting a specific type of compost, such as OFMSW.

Consistent with previous studies, our results demonstrated that, among Italian potential users, the level of education could have a determinant impact on the likelihood of the adoption of compost and its actual adoption [31,43,47]. An explanation is that more educated and trained potential users (namely farmers or households) better understand the agronomic benefits of compost adoption in their farms as well as the techniques of compost application [44]. Furthermore, besides low educational level, Paul et al. [31] observed that the adoption of the compost might be also inhibited by the lack of professional organizations able to guide and facilitate farmers to apply organic fertilizer. This result suggests the need to raise potential users' awareness of OFMSW compost benefits through training lessons, educational workshops, information and education campaigns [51].

Regarding the role of social factors in the context of alternative or sustainable practices, contrasting results are available in literature [58,59]. Consistently with our results, many previous studies pointed out that a peer-network can be determinant in the adoption of new practices, innovations and their dissemination [31,58,60–63]. In this context, many authors working on farmers' groups [62,64,65] [reported that for farmers engaged in innovative and alternative activities, discussing with their peers and sharing experiences with them can be crucial in the decision to adopt a new practice. Indeed, the so-called "social learning" through networking has been demonstrated to be pivotal to the emergence of alternative systems, such as conservation tillage [66], organic farming [67,68] and rotational grazing [69,70].

With regard to the adoption of innovative or alternative practices, peers, neighbors, friends or consultants can play a relevant role during the information, trial and application stages, and when potential users have to consider the advantages of such new practices [71]. In addition, the main difference between the role of family members, consultant and technicians in affecting the decision-making process was previously detected: family members and friends are more consulted "for problem detection", "seeking for option" and in terms of "crop decisions" [63,72], whereas consultants and technicians were mainly consulted in the case of "problem solution" and "seeking for new practices" [63].

Focusing on peer-to-peer knowledge sharing in a rural context, generally, a farmer makes a decision to perform any activity, such as sowing seeds, the spraying of pesticide and selection of fertilizers, based on a priori knowledge, experience and the trend followed by the neighboring farmers and their local farming community, supposing the activities carried out by neighboring farmers mirror the best farming practices that are being carried out by all the farmers throughout the region in similar environments [73]. Thus, farmers are particularly interested in other farmers' activities, as they are in the same business area. Similarly, Sutherland et al. [58] stated that farmers do not make their decisions based on mere "self-reported information" but they prefer evaluating "with their own eyes" how effective or efficient a system or an innovation is. Moreover, it was affirmed that other persons who are not experts in farming activities are viewed with skepticism because of their perceived lack of competences and/or objectiveness [58]. In parallel, considering knowledge sharing among users other than farmers, few studies are available. The most representative examples are constituted by the community gardening context described by Okvat et al. [74] and Hunter et al. [75]. Indeed, members within this type of community adopt social learning for practicing urban agriculture; thus, the creation of space for communication, information sharing, and co-learning among diverse members is promoted.

Hence, based on all previous experiences, and based on the findings of the present study, stakeholders and academics are called to implement some strategies to encourage people's adoption of compost from OFMSW. A common theme throughout the recommendations is to facilitate the communication and exchange of experience between actual compost users and the non-users, reflecting and discussing together the progress they are making and the practices they are using. Practical experiential knowledge brings to farmers confidence, professional satisfaction and autonomy, which, in turn, are strong motivators for further learning and provide useful input and feedback during trial and adoption [26]. These learning processes are embedded in farmers' daily relational structures, which are usually local and self-organized [76]. Furthermore, when conducting farming seminars or presentations at events, compost producers should invite landowner, the farmers' family and advisors in order to stimulate peer-to-peer debate, learning, information and know-how sharing [38,77]. Indeed, when users are involved in discussions, they are more likely to perceive that they have more decision-making control of their business and then, they are more likely to adopt a specific innovation, material and/or behavior [77]. In this context, bringing together compost-users and non-compost-users can have several benefits: 1. To establish higher trust between expert users, non-expert users, and the 'outsider', such as consultants and researchers, 2. Help to create greater social pressure and shape social norms, and 3. Provide a peer-network as support for the decision-making, sharing attitudes, beliefs and priorities.

Moreover, Ingram [64] reported that even though not all farmers are willing to share their experiences (e.g., due to fear of criticism or desire to protect themselves from competitors) the need to share knowledge and tap into others' experiences often arises because of the absence of both information and peer/professional support. Likewise, Chen et al. [23] highlighted that the main factors hindering the adoption of solid organic waste compost is insufficient information (e.g., about nutrient content, pathogen, trace metals, supply volume and application). In this framework, providing proper and comprehensive information and stimulating knowledge sharing could be helpful for promoting adoption among potential users [23,78,79].

Limitations of the Study and Future Aims

Some limitations of the present study need to be acknowledged. The present study is limited in size, thus the obtained results cannot be generalized. Thus, in future studies, a representative sample should be involved to confirm these results. Moreover, most of the studies available in scientific literature just refer to rural frameworks, thus most of the references used to discuss our results draw parallels from farmer-to-farmer settings, while, for the moment, the category of hobbyists as potential users is still quite under-investigated. Despite these limitations, the results contributed to assessing the role of peers and social networks in spreading knowledge and information among professionals and hobbyists and how they can influence the decision to adopt compost obtained from OFMSW. In the present study, peers and social networks were investigated with a generic definition without discriminating between family members, neighbor farmers and consultants, etc.; however, future studies could further investigate which of these sub-categories (peers, family members, friends and neighboring farmers etc.) have more influence on farmers' behavior and their decision-making process.

5. Conclusions

In conclusion, when thinking about strategies encouraging people's adoption of compost from OFMSW, it is important not to underestimate the social dimension and in particular the role of peer networks. Social networking represents an effective way to overcome information, knowledge gaps and potential users' lack of confidence in the nutrient content and safety of this organic product. For this purpose, any intervention aimed at promoting the adoption of compost from OFMSW would be enhanced if accompanied by a process of social learning, e.g., sharing experience with actual adopters or observing trial outcomes from compost production and utilization.

In brief, institutions providing formal knowledge and agricultural policy makers should be engaged with the aim to: 1. Facilitate knowledge exchange and connections among different actors, 2. Support local-level initiatives, such as networking, cooperation, mentoring and the exchange of experiences, as they are particularly beneficial for spreading the existing local knowledge faster, and 3. Training in 'soft' skills to strengthen networks and improve the learning outcomes.

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