

Report

The Awareness of Japanese Consumers and Diamond Jewelry Companies about Issues in the Diamond Industry

Analysis from Surveys in 2017 and 2021



October 2022



Report: The Awareness of Japanese Consumers and Diamond Jewelry Companies about Issues in the Diamond Industry: Analysis from surveys in 2017 and 2021

Published in October 2022

Authored by: Diamonds for Peace

Acknowledgement

We would like to express our sincere gratitude to everyone involved in the survey, notably the companies who kindly responded to our mail survey, salespersons who answered our questions in the mystery shopping survey, and the respondents in the consumer survey.

Of the three surveys implemented in 2021, the consumer survey was funded by KAKENHI (No. 21H00632). We published the result in the magazine vol. 18 (2022) (p.8 – p.15) issued by the Japanese Society of Geo-pollution Science, Medical Geology and Urban Geology. We would like to show our appreciation to the stakeholders who made it possible. In this report, we present the results of the consumer survey by citing what was published in the magazine.

Our appreciation also goes to our team members who worked on the surveys, and we also would like to extend our thanks to our volunteer members for their support in the survey implementation, and the preparation and finalization of the report.

About Diamonds for Peace

Diamonds for Peace (DFP) is a non-profit organization with a vision to make a world in which diamonds are mined, cut and processed with humanitarian and environmental considerations. Our missions are to improve the working conditions and social status of the workers in the diamond supply chain, and to promote ethics and fairness in the diamond industry.

Learn more

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Summary

The diamond jewelry market worldwide is estimated to have reached about US\$64 billion in 2020, playing a major part in the global economy. However, there exist various issues in the industry, notably forced labor, child labor, conflict diamonds, and the destruction of ecosystems. The purpose of this study is to evaluate the awareness of consumers and diamond jewelry companies in Japan of the issues in the diamond industry. We have compared the results from the two surveys undertaken in 2017 and 2021, and analyzed the changes.

The study employed three different surveys. In the consumer awareness survey, we used an online survey service to ask registered participants to clarify their awareness of problems in the diamond industry. Approximately 1,000 people participated in the surveys in 2017 and 2021 respectively. As for the mail survey in 2021, we sent out the questionnaire to diamond jewelry companies which had offices in Japan, and received responses from five of them. For the mystery shopping surveys, we selected diamond jewelry companies that had stores in the Tokyo metropolitan area, and visited 16 brands in 2017 and 33 brands in 2021 to ask questions about ethical considerations and traceability of the diamonds they were selling.

As a result, it is clear that about 60% of Japanese consumers are unaware of issues related to diamonds. Even those who believe they are aware of the problems may not know about those which still persist such as conflict diamonds, torture, sexual violence, and murder; this is accompanied by a further decline in awareness from 2017 to 2021. Also, the study identified that the awareness of issues does not necessarily lead directly to ethical intention to buy or actual final behavior in diamond purchases. Problems and systems in the diamond industry are not correctly understood even by some diamond jewelry companies. Although some companies have made efforts to improve the traceability of their diamonds, hardly any company is aware of the conditions in diamond mines and cutting/polishing factories.

We will use the study results to improve our educational activities and to make positive changes in the society. We will conduct similar studies and share the findings periodically, to record and understand the changes in people's awareness and behaviors, and to continually improve our activities.

Glossary

<p>Fairtrade</p>	<p>Fairtrade indicates “fair and equitable trade” and refers to “the trade mechanism” that aims to improve the lives of underprivileged producers and workers in developing countries and to support their independence, by continually purchasing raw materials and products from developing countries at appropriate prices (FLJ, 2021a). Fairtrade Standards are designed by Fairtrade International, and the following common principles are considered: “Social development”, “Economic development”, “Environmental development”, and “Prohibition of forced labor and child labor” (Fairtrade International, n.d.). Products that meet the standards are labelled with the Fairtrade certificate (FLJ, 2021c). Gold is included in their listing, whereas diamonds are not (FLJ, 2021b).</p>
<p>Fairmined</p>	<p>The Fairmined certification scheme is a system for gold and associated precious metals, managed by the Alliance for Responsible Mining (ARM); it supports “the sustainable development of artisanal and small-scale mining organizations”, and includes the following components: “Organizational development”, “Social development”, “Environmental protection”, and “Working conditions” (ARM, 2019).</p>
<p>Kimberly Process Certification Scheme</p>	<p>The Kimberly Process Certification Scheme is an international certification system created to regulate the distribution of conflict diamonds; the Kimberly Process defines conflict diamonds as “<u>rough diamonds used to finance wars against legitimate governments</u>” (KP, 2021).</p>
<p>RJC (Responsible Jewellery Council)</p>	<p>RJC is a council established in 2005 by 14 organizations, including Cartier and Tiffany & Co., which creates an international code of conduct focusing on business ethics and responsible supply chains in the jewelry and watch industry, and operates a certification system in accordance with these standards (RJC, 2021). The code of conduct stipulates the following six items (RJC, 2019): “General Requirements” (i.e., legal compliance), “Responsible supply chains, human rights, and due diligence”, “Basic labor rights and working conditions”, “Health, safety and environment”, “Gold, silver, Platinum Group Metals, diamond and colored gemstone products”, and “Responsible mining”.</p>
<p>SCS Global Services</p>	<p>SCS plays a leading role in third-party certification, covering a wide range of industries, including environment, sustainability, and food safety and quality (SCS Global Services, 2021). Their third-party certification standards for natural and lab-grown diamonds include the following features: “extensive environmental, social and governance (ESG) requirements”, “climate neutrality”, “net zero life cycle impacts”, and “a comprehensive traceability, that improves the reliability of source-to-market flow”, and “sustainability investments that support vulnerable communities, further reduce net impact, and contribute to a safer world” (SCS Global Services, 2020).</p>

Forevermark	Forevermark, a diamond brand by De Beers Group, inscribes their brand logo and individual certified numbers on diamonds that meet its own standards (including beauty, rarity, and ethics) in all jewelry manufacturing stages (De Beers, 2021).
4C	The 4C, or 4Cs, is a globally acknowledged quality standard for diamonds, that represents “Color”, “Clarity”, “Cut”, and “Carat Weight” (GIA, n.d.).
Ethical Jewelry	Jewelry that was ethically mined, produced and manufactured with consideration for people, the environment, and society
Ethical Diamonds	Diamonds that are ethically mined and cut with consideration for people, the environment, and society
Conflict Free	Conflict free means not being related to any conflicts; this term is used to describe minerals including diamonds. Conflict free diamonds refer to diamonds that are free from any conflicts, which have not financed any conflicts.
Responsible Sourcing	Responsible sourcing is defined as “the management of sustainable development in the provision or procurement of a product” by British Standards Institution (BSI) (BSI, 2009). Based on this definition, the International Council on Mining and Metals (ICMM) states two activities for Responsible Sourcing: 1) Incorporating environmental, social, and broader cost considerations into the procurement processes 2) Supplying minerals and metals that meet environmental and social performance standards (ICMM, 2015).
Supply Chain	Supply chain is a series of activities required to deliver products and services to consumers, including the procurement of raw materials or components, manufacturing, inventory management, shipping, and sales (CIPS, n.d.).
Blockchain	According to the Ministry of Internal Affairs and Communications (MIC) in Japan, Blockchain technology is “a kind of database where terminals in an information communication network are directly connected to each other, and transactions are processed and recorded using encryption technology in a decentralized manner”; it allows proper transactions even if there is a partial network failure; and it makes data alteration almost impossible (MIC, 2018).
Due Diligence	According to the Organization for Economic Cooperation and Development (OECD), Due Diligence is “the process enterprises should carry out to identify, prevent, mitigate and account for how they address [...] actual and potential adverse impacts in their own operations, their supply chain and other business relationships”; it acknowledges that business activities may have adverse impacts related to human rights, environment, bribery, and so forth; and encourages positive contributions (OCED, 2018). OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas provides a five-step framework which should be carried out by all companies in the mineral supply chain, including those who deal in diamonds (OECD, 2016).

Conflict Minerals	Conflict minerals are mineral resources mined in conflict areas. The U.S. Dodd-Frank Act Section 1502 Conflict Minerals specifies four minerals requiring regulation: tin, tantalum, tungsten, and gold (3TG) (Dodd-Frank Wall Street Reform and Consumer Protection Act, 2021). The OCED Due Diligence Guidance does not limit the scope to 3TG, but widely covers minerals from conflict-affected and high-risk areas (OECD, 2016).
Lab Grown Diamonds	Lab grown diamonds, also known as artificial or synthetic diamonds, are diamonds produced in laboratories or factories using either of the two processes: High Pressure, High Temperature (HPHT) or Chemical Vapor Deposition (CVD) (GIA, 2019). It is conflict free, however, ethics remain controversial due to greenhouse gas emissions in the production process, and negative economic influences on diamond mining areas (Oliver Milman, 2020).
Blood Diamonds	Blood diamonds refer to diamonds mined in conflict areas, also called conflict diamonds. The term is known by many people through the title of the movie “Blood Diamond”, which was released in 2006 and illustrated the civil war and the conflict diamonds in Sierra Leone, Africa (Warner Bros., 2021). The expression “Blood Diamonds” is also used to describe diamonds that are linked with the problem of human rights violation in the mining and manufacturing process, signifying that the blood of people has been shed in the process.

Background

The diamond jewelry market worldwide is estimated to have reached about US\$64 billion in 2020 (Bain & Company & AWDC, 2021). Annually production is about 110 million carats (approx. 22.2 tons) are mined (Bain & Company & AWDC, 2021), of which, about 28% are mined in Russia, followed by Botswana and Canada, with 15% and 12% respectively (Statista, 2021b). This enormous diamond production is dominated by a handful of companies – Alrosa from Russia accounts for 27%, and De Beers, a UK-based multinational company, accounts for 22% (Statista, 2021a).

Although diamonds play a major role in the global economy, there are a number of ethical issues in the diamond industry. Forced labor, particularly unfair labor at low wages to pay back high-interest loans, is still observed and reported in mining and cutting/polishing - diamond-related domains (ILO, 2017). The United States (US) Department of Labor reported the existence of child labor and/or forced labor in the diamond production process in the following list of countries: Angola, Central African Republic, Democratic Republic of the Congo, Guinea, Liberia, and Sierra Leone (United States Department of Labor, 2020). There are probably similar problems in countries other than the six listed, as 43 million workers in 77 countries around the world are reported to be engaged in artisanal mining (ASM Inventory, 2018). Artisanal mining is one of the professions that is unfairly paid. The true price gap - the difference between the market price of a product, and its true price which includes all direct external costs - for diamonds this is considered to be US\$137 per carat for large-scale mining, US\$105 for lab-grown diamonds, while it is US\$1,510 for artisanal mining (True Price, 2017). The largest components of the high true price gap in artisanal mining are health and safety impacts, for instance, the number of fatal incidents is 90 times more likely to occur there than in large-scale mining operations; nonetheless, no compensation has been paid for such risks (True Price, 2017). In addition, extremely low wages is another major driver of the gap (True Price, 2017).

The problem of diamonds used for financing conflicts, so-called conflict diamonds, still remains (HRW, 2018; KPCS, 2019). The movie “Blood Diamond” in 2006, which illustrated the civil war and the conflict diamond in Sierra Leone (Warner Bros., 2021), led many people to pay attention to the issues surrounding diamonds. The Kimberley Process (KP) Certification Scheme was established in 2003 to address the issues (KP, 2021), however, its effectiveness has been questioned (KPCS, 2019; Winetroub, 2013) due to a narrow definition of conflict diamonds as “rough diamonds used to finance wars against governments” (KP, 2021). According to the report in 2017 by Global Witness, for instance, diamonds from Zimbabwe are certified by KP and are being circulated freely in the markets around the world, despite the role played by the country’s security forces in serious human rights abuses (Global Witness, 2017). At the time of writing this report in 2022, Russia is invading Ukraine. The report by the International Peace Information Service points out that the revenue from Alrosa, a major Russian diamond mining company, seems to fund Russian military (Merket, 2022). However, KP does not recognize the Russian diamonds as conflict diamonds.

Diamond mining is also closely related to environmental issues such as soil erosion, deforestation, and destruction of ecosystems (Olulye, 2021). The environmental impacts of a single carat of mined diamond could reach 160kg CO₂eq in carbon footprint, 1.86kg of particulate matter in the air, and 2.72tons of heavy metal in the soil, as well as many others (Oluleye, 2021). A Canadian environmental group reported the failures of monitoring and reporting at a diamond mine owned by De Beers in Canada, and raised the alert as to the risk of damage to aquatic life as well as to the health of the population in the surrounding area (CAPWS Wildlands League, 2015). Although a lot of modern diamond mines have started some actions to protect the environment in accordance with ISO14001 standards, the majority of artisanal diamond mining, which is usually informal, is undertaken outside of the global standards and its environmental impact or related impacts are unknown (World Diamond Council, 2021).

In the past two decades, ethical consumption has been a burgeoning movement in western countries – though the link between ethically-minded consumers and actual unethical purchases has yet to be fully explained (Bray et al., 2011; Carrington et al., 2014; de Pelsmacker et al., 2005; Sun, 2020). In Japan, the terms like “ethical” or “ethics” are becoming increasingly common in multiple media. However, to the best of our knowledge, there is no investigation or analysis on the awareness of consumers and diamond jewelry companies in Japan of issues in the diamond industry.

According to the Global Diamond Industry report published in 2021, the diamond jewelry market in Japan was estimated to be the fourth largest in the world, after the markets of the United States, China, and Europe (Bain & Company and AWDC, 2021). It also reported that consumers in Japan remained cautious of in-person purchases due to the COVID-19 pandemic, but that social media had boosted self-purchases and online shopping, which stimulated the non-bridal market (Bain & Company and AWDC, 2021). If Japanese consumers make ethical decisions in their diamond purchases, it is expected to have a certain positive impact on the global diamond market as a whole.

Diamonds for Peace (DFP) is a non-profit organization that aims to create a world in which diamonds are mined, cut and processed with humanitarian and environmental considerations. In 2017, we conducted a study on the awareness of Japanese consumers and diamond jewelry companies of issues in the diamond industry (DFP, 2018a, 2018b). In this study, we investigated the awareness compared to 2021 and analyzed the changes. The findings from this study will be used to further improve our educational activities.

The Purpose of the Study

The aim of this study is to clarify the awareness of consumers and diamond jewelry companies in Japan about issues in the diamond industry.

Methodology

The study consists of three different surveys below. The methodology for each survey is described in each section.

1. The consumer awareness survey
2. The mail survey targeting diamond jewelry companies
3. The mystery shopping survey targeting diamond jewelry retailers

1. Consumer Awareness Survey

1.1. Methodology

1.1.1. Data collection

We collected the data through online monitoring surveys in 2017 and 2021, using the online survey service Fastask provided by JustSystems Corporation (JustSystems Corporation, 2021). Informed consent was obtained from participants at the time of registration to the service, and registered participants received points upon taking a survey. The surveys targeted (potential) diamond consumers in Japan, and sent questionnaires to registered participants who fulfilled the criteria listed below. The data were collected in an anonymous manner.

[The survey in 2021]

Approximately 4.5 million online participants were registered in the Fastask network as of 28th August 2021. The target respondent number was set at 1,000 in order to make it equal to that of the 2017 survey. The ratio between the people living in Tokyo metropolitan area – Tokyo, Chiba, Saitama, and Kanagawa prefectures– and those living in other areas was set at 3:7, reflecting the preliminary results from the 2020 census (MIC, 2021). The survey limited its respondents to those aged 20 and over, and targeted to include an equal number in each age group. The male to female ratio was set at 1:1 for each age group.

[The survey in 2017]

The number of registered participants in the Fastask network at the time of the survey in 2017 is not shared by the company. The survey aimed at collecting answers from 1,000 respondents. The population ratio of Tokyo metropolitan area to other areas was set at 1:1. The age group ratio was the same as that of the 2021 survey. The male to female ratio was not set.

1.1.2 Questionnaire

The questionnaire for the survey 2017, which we developed after internal discussions, included questions that ask for perceptions about issues in the diamond industry. Prior to the 2021 survey, we examined the questions in the 2017 survey and made minor changes such as adding options based on open comments written by respondents in the 2017 survey. The questionnaires were reviewed by Fastask for effectiveness and appropriateness. The questionnaires used are in Appendix 1 and 2.

1.1.3 Survey period

Each survey was conducted during the time periods below. In the Fastask system, surveys are automatically closed after seven days.

[The survey in 2021] From 10th to 17th September 2021

[The survey in 2017] From 22nd to 29th November 2017

1.1.4. Data Analysis

Excel (Version 2110) was used to analyze the data. Descriptive statistics were applied for analyzing respondents' characteristics and responses to the questions, developing cross-tables and graphs. The responses to open-ended questions were coded to quantify them. We applied Chi-square tests with some answers to test for statistically significant differences between the 2017 and 2021 surveys. We used a p value of less than 0.05 to determine significance.

1.2. Results

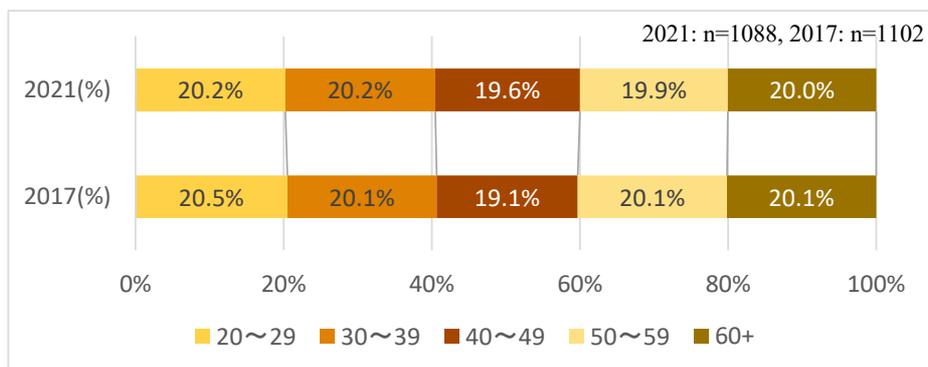
1.2.1. Respondents Profile

A total of 1,088 people responded to the 2021 survey, and 1,102 responded in 2017. The male to female ratio was almost 1:1 in 2021, while the number of male respondents was slightly higher in 2017. The proportions of each age group were almost equal in both surveys.

FIGURE 1: MALE TO FEMALE RATIO

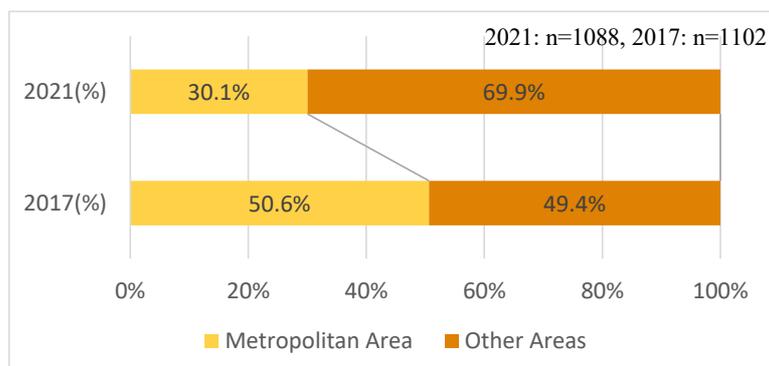


FIGURE 2: AGE GROUP



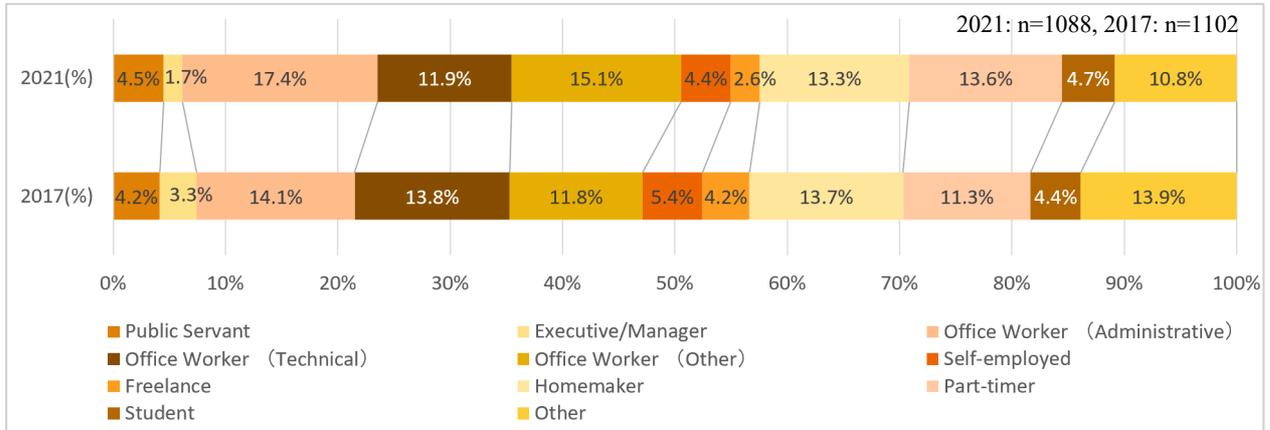
The population ratio of Tokyo metropolitan area to other areas was 3:7 in 2021 and 1:1 in 2017, as we changed the survey setting according to the latest census result.

FIGURE 3: RESIDENCIAL AREA



Regarding occupations, the proportion of administrative office workers was the highest in both years (2021: 17.4%, 2017: 14.1%), whilst that of executives or managers was the lowest in both years (2021: 1.7%, 2017: 3.3%).

FIGURE 4: OCCUPATION



The proportion of unmarried respondents slightly increased from 39.3% in 2017 to 45.7% in 2021. About half of the respondents in both surveys answered that they had children.

FIGURE 5: MARITAL STATUS

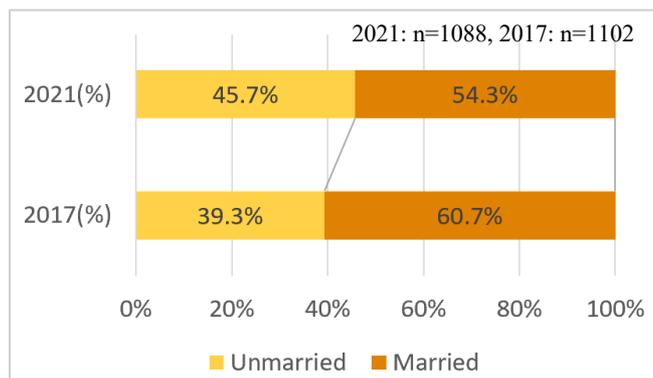
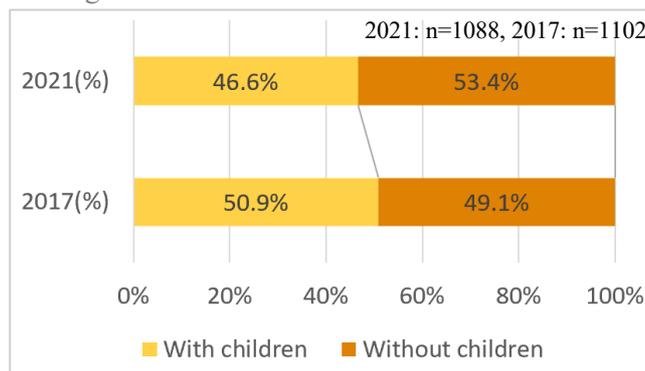


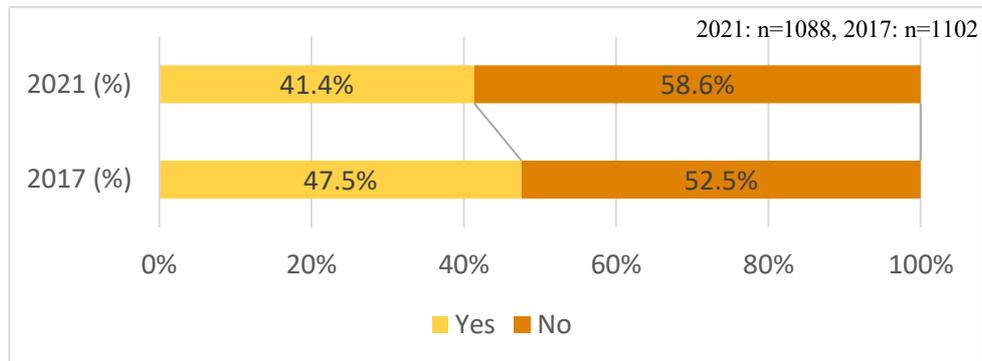
Figure 6: WITH OR WITHOUT CHILDREN



1.2.2. Awareness on the issues in the diamond industry

First of all, we asked respondents if they had ever bought a diamond(s). In 2021, 41.4% of the respondents answered that they had purchased a diamond(s) before, a slight decrease from 47.5% in the 2017 survey.

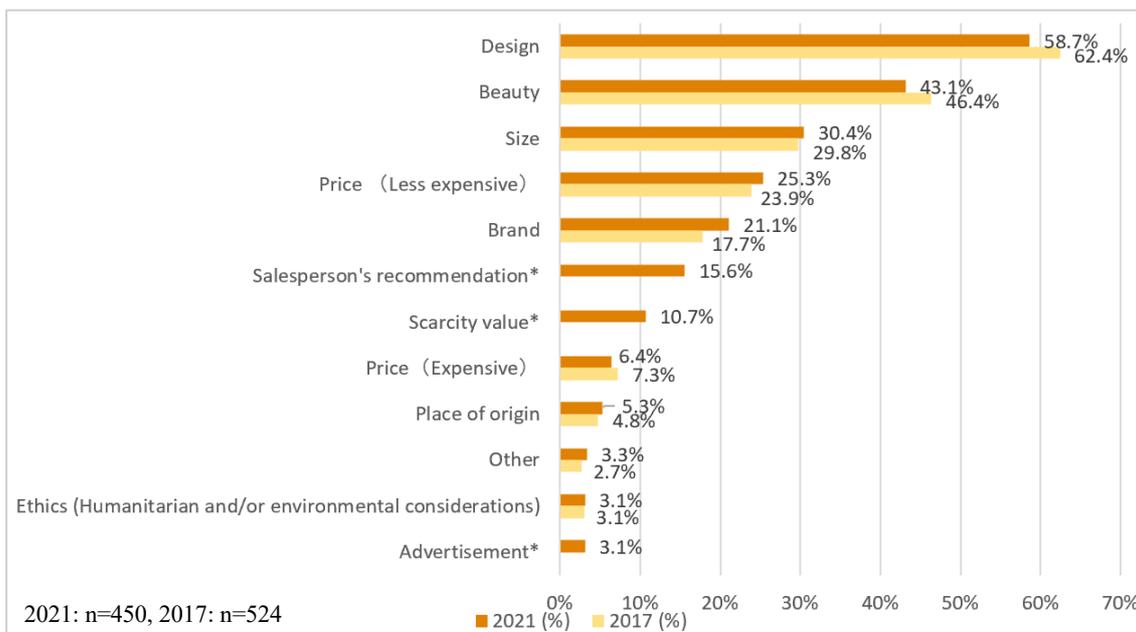
FIGURE 7: DIAMOND PURCHASE EXPERIENCE



Respondents who had purchased a diamond(s) were asked on what criteria they based their purchasing decision (Multiple answers allowed), and the most common response was “Design” with 58.7% in 2021 and 62.4% in 2017. Secondly, they selected “Beauty” (2021: 43.1%, 2017: 46.4%), “Size” (2021: 30.4%, 2017: 29.8%), and then “Price (less expensive)” (2021:25.3%, 2017:23.9%). The order of answers did not change from 2017 to 2021. “Place of origin” was selected by only 5.3% and 4.8% in 2021 and 2017 respectively. “Ethics (Humanitarian and/or environmental considerations)” was selected by only 3.1% in both surveys. We coded and categorized the descriptions of "Other", and the most common description was <Another person’s preference/request>, such as “My partner's preference” and “My mother's preference” in 2021. In 2017, <Anniversary> such as “An engagement ring”, was the most common description.

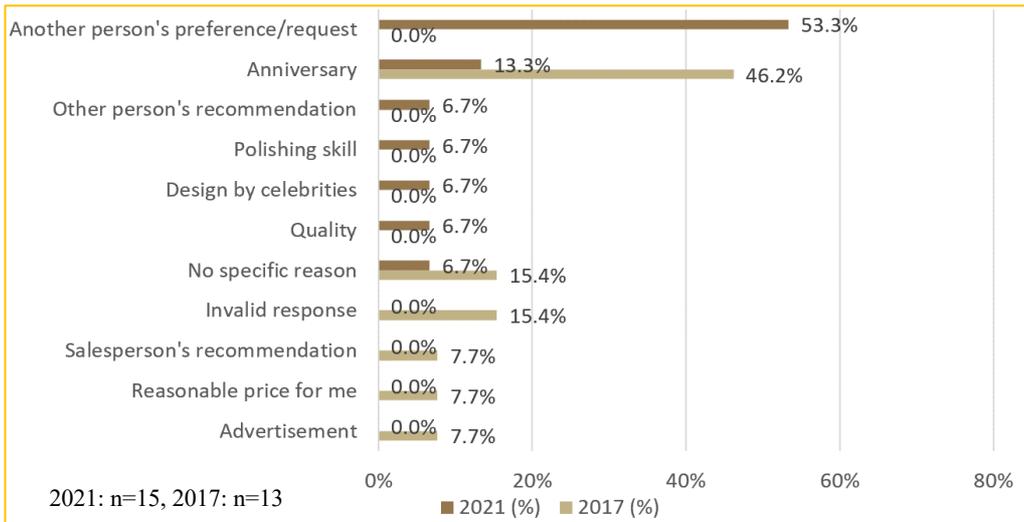
FIGURE 8: CRITERIA FOR DIAMOND JEWELRY PURCHASE

(Multiple Answers Allowed)



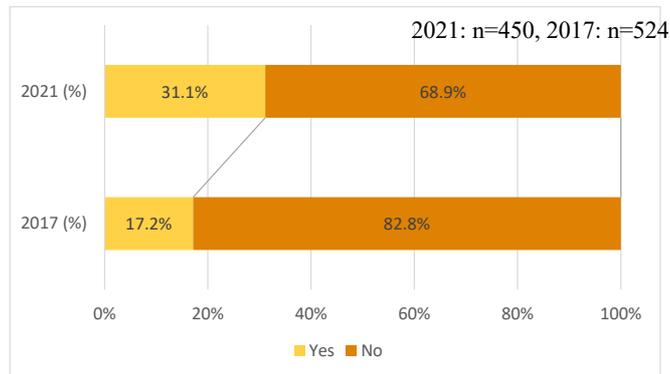
* Options newly added in the 2021 questionnaire

FIGURE 9: DESCRIPTIONS OF “OTHER”



Respondents who had purchased a diamond(s) were asked if they had asked a salesperson about the diamond’s place of origin and humanitarian and/or environmental considerations in the mining and manufacturing process. In 2021, 31.1% of them answered “Yes”, which was 13.9 percent points higher than 17.2% in 2017. The difference was statistically significant, as the p-value was less than 0.05 in the Chi-square test.

FIGURE 10: EXPERIENCE OF ASKING ETHICAL QUESTIONS



Those who answered “Yes” to the above question were then asked for the actual questions they had asked and the answers from the salesperson. We coded the responses and quantified them. The most common response was <Invalid answer>, including “Nothing in particular”, in both years (2021: 46.2%, 2017: 38.1%). The second most common responses in 2021 were <Question(s) about the diamond’s place of origin> and <Question(s) other than the diamond’s place of origin or humanitarian and/or environmental considerations in the mining and manufacturing process> at the same ratio of 16.0%. In 2017, the second common response was <Question(s) about the diamond’s place of origin> with 22.2%, which was followed by <Unclear question/intention> with 14.3%. <Question(s) about humanitarian and/or environmental considerations in the mining and manufacturing process> were written by 3.8% in 2021 and 7.9% in 2017. <Question(s) about the place of origin, and humanitarian and/or environmental considerations in the mining and manufacturing process> were written by 0.9% and 0.0% in 2021 and 2017 respectively.

FIGURE 11: QUESTIONS TO SALESPERSONS (OPEN-ENDED)

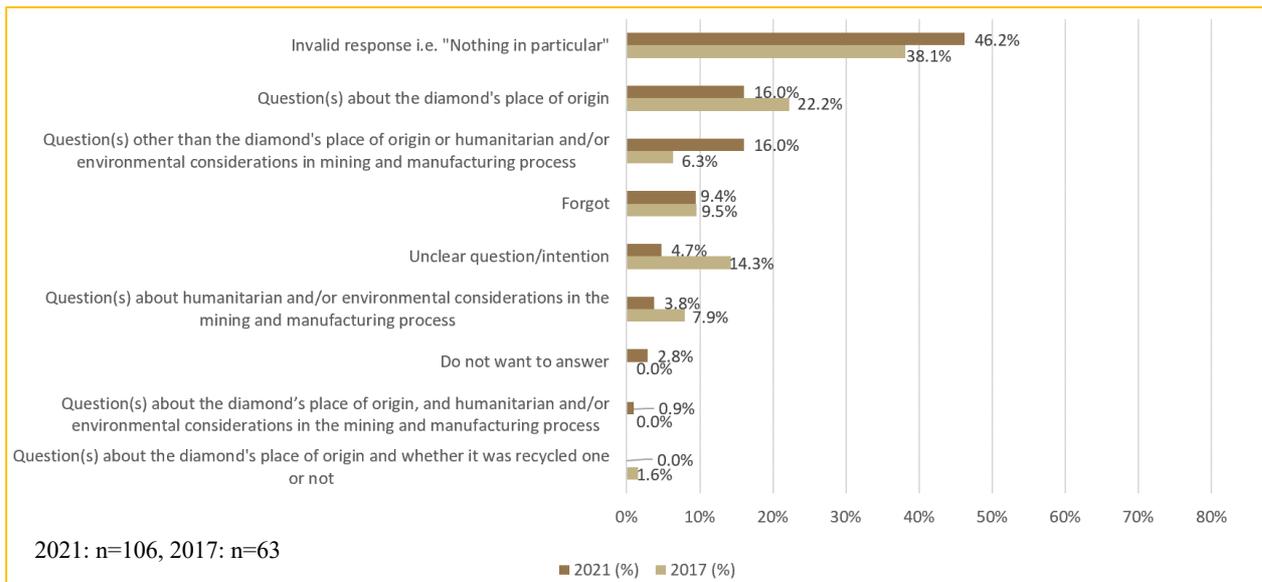
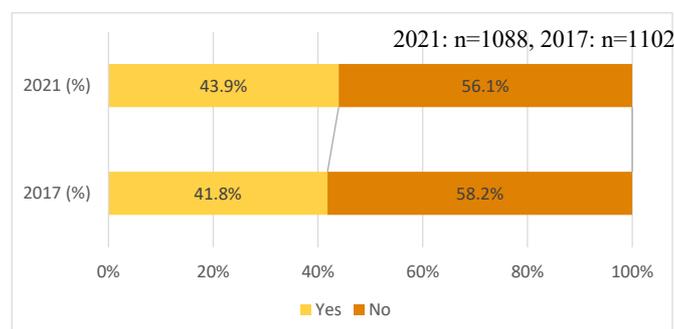


Table 1: Question categories and example responses from the 2021 survey relevant to humanitarian/environmental issues

Question categories	Example responses
Question(s) about the diamond's place of origin	- Where is the place of origin? - From abroad. - Where is the diamond mined? – In Russia.
Question(s) about humanitarian and/or environmental considerations in the mining and manufacturing process	- When I asked about the mining environment, they explained it to me, showing some documents.
Question(s) about the diamond's place of origin, and humanitarian and/or environmental considerations in the mining and manufacturing process	- I asked the mining area and its environment, but the salesperson knew nothing. So, I decided not to buy that time.
Unclear question/intention	- Is it safe? – Safe.
Forgot	- I do not remember the specific question.
Do not want to answer	- I am afraid I cannot answer.

In 2021, 43.9% of the respondents answered that there existed humanitarian and/or environmental issues related to diamonds, while the ratio in 2017 was 41.8%. There was no statistically significant difference between the two ratios.

FIGURE 12:EXISTENCE OF HUMANITARIAN OR ENVIRONMENTAL ISSUES



Among those who answered that there existed humanitarian and/or environmental issues related to diamonds in 2021, 54.2% answered “Extremely low wages” was one of the current issues. It was a slight increase from 48.5% in 2017, but the difference was not statistically significant. The second common answer in 2021 was “Destruction of mining land” selected by 52.9%. The ratio has slightly increased from 46.9% in 2017, however the difference was not statistically significant. The proportion of “Funding terrorism, conflict, civil war”, the most common response in 2017 at 54.7%, has significantly decreased to 44.4% in 2021. Similarly, the proportion of “Smuggling”, the second most common answer in 2017 at 53.5%, has significantly decreased to 46.9% in 2021. In both years, the least common options (except for “Do not know”) was “Torture” (2021: 8.6%, 2017: 14.9%), followed by “Sexual violence” and “Murder”. The percentage of selecting these options significantly decreased by 6-7 percent from 2017 to 2021. The option “Other” was selected by 4% and 0.5%, in 2021 and 2017 respectively. The single comment left under “Other” in 2021 was “Monopoly by certain companies”. We had the options of “Such problems are not occurring now” and “Poor working conditions” in the 2017 survey, but removed them from the 2021 survey to prevent confusion.

FIGURE 13: CURRENT ISSUES RELATED TO DIAMONDS

(Multiple answers allowed)

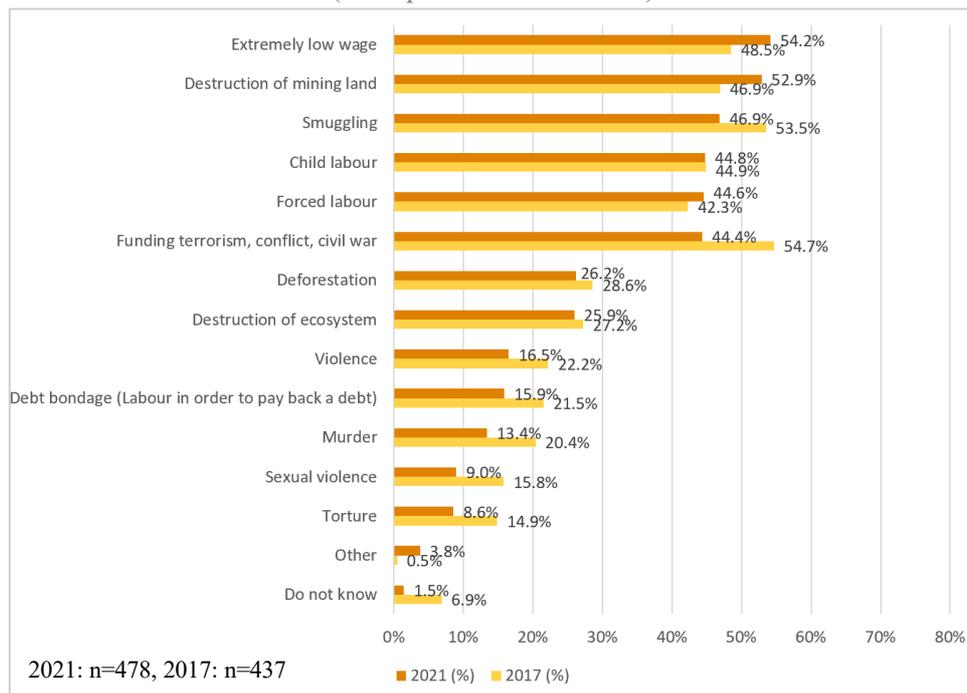


Table 2: Current issues related to diamonds
(Multiple answers allowed; 2017: n = 437, 2021: n = 478)

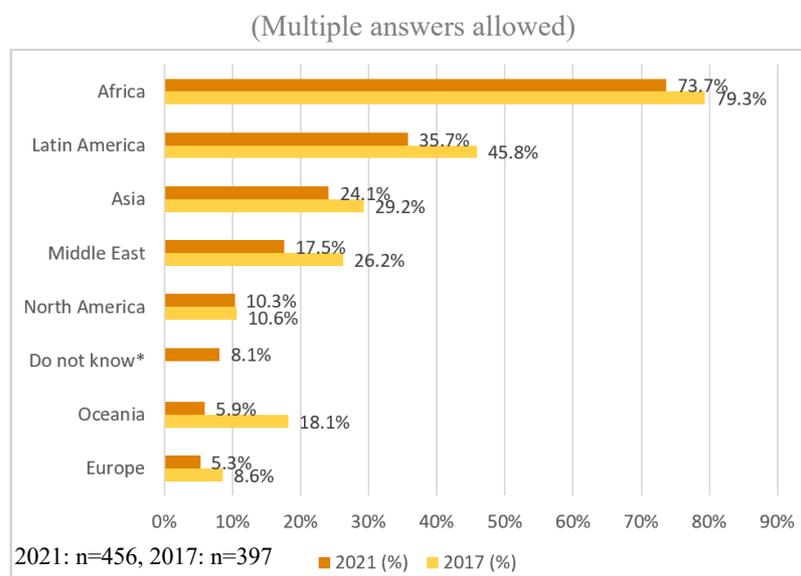
	2017 (number)	2017 (%)	2021 (number)	2021 (%)	2021(%) - 2017(%)	p-value
Total	437	100.0	478	100.0		
Extremely low wages	212	48.5%	259	54.2%	5.7	0.086
Destruction of mining land	205	46.9%	253	52.9%	6.0	0.069
Smuggling	234	53.5%	224	46.9%	-6.7	<0.05
Child labor	196	44.9%	214	44.8%	-0.1	0.980
Forced labor	185	42.3%	213	44.6%	2.2	0.497
Funding terrorism, conflict, civil war	239	54.7%	212	44.4%	-10.3	<0.05
Deforestation	125	28.6%	125	26.2%	-2.5	0.405
Destruction of ecosystems	119	27.2%	124	25.9%	-1.3	0.659
Violence	97	22.2%	79	16.5%	-5.7	<0.05
Debt bondage (Labor in order to pay back a debt)	94	21.5%	76	15.9%	-5.6	<0.05
Murder	89	20.4%	64	13.4%	-7.0	<0.05
Sexual violence	69	15.8%	43	9.0%	-6.8	<0.05
Torture	65	14.9%	41	8.6%	-6.3	<0.05
Other	2	0.5%	18	3.8%	3.3	N/A
Do not know	30	6.9%	7	1.5%	-5.4	<0.05

Data were analyzed using Chi Square test.

P-value was not calculated when an expectation value was smaller than 10.

Those who answered that there existed humanitarian and/or environmental issues related to diamonds, were then asked about areas where they thought such problems were occurring. The most common response was “Africa” in both surveys with 73.7% and 79.3%, in 2021 and 2017 respectively. Next “Latin America”, “Asia”, and “Middle East” were selected, all of which did not change the order from 2017 to 2021. In the comment field of the questionnaire, one of the respondents in 2021 specified the countries as Zaire, Sierra Leone, Burkina Faso, Zambia, etc.". A total of seven comments were left in the survey 2017, including “Siberia and Canada” “Russia” and “I don't know”.

FIGURE 14: THE AREAS WHERE DIAMOND RELATED ISSUES ARE OCCURRING



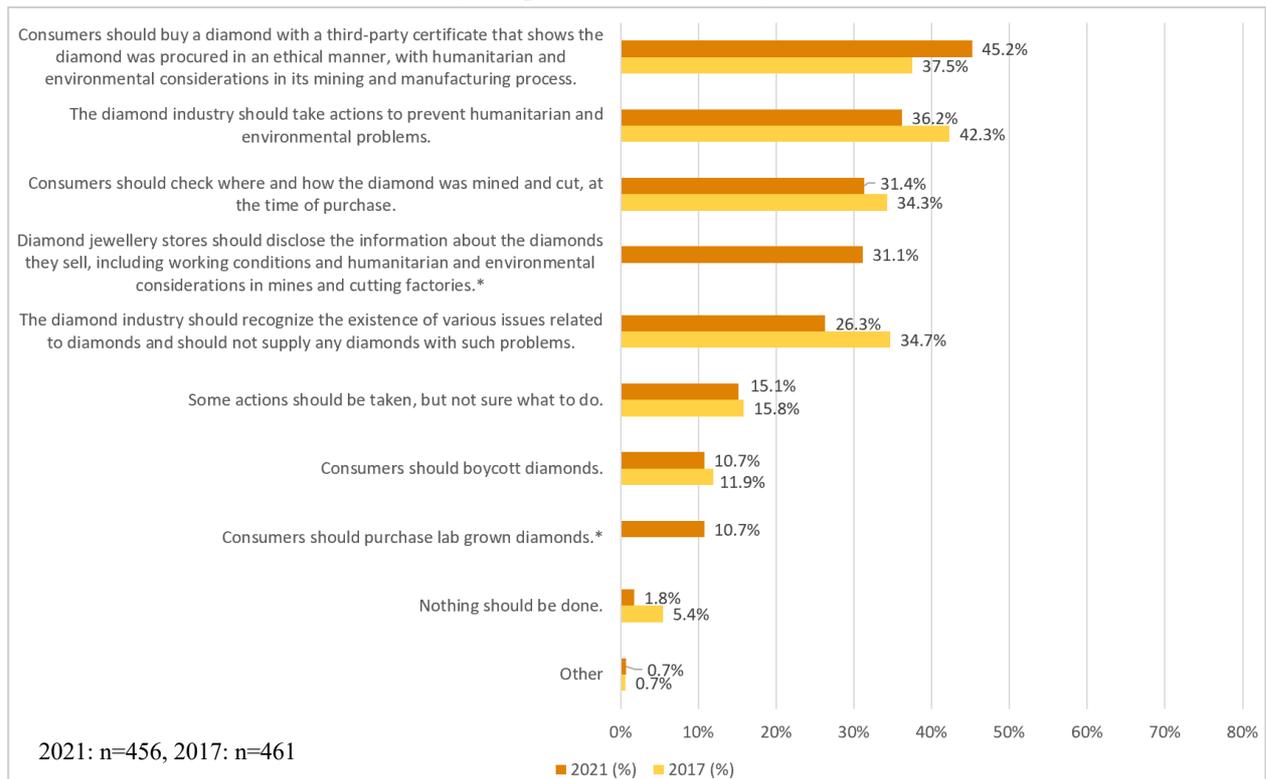
* Option newly added in the 2021 questionnaire

In responding to the question “If issues related to diamonds exist, what should we do?” (Multiple answers allowed), 45.2% of the respondents in 2021 answered “Consumers should buy a diamond with a third-party certificate that shows that the diamond was procured in an ethical manner, with humanitarian and environmental considerations in its mining and manufacturing process”. This choice was 7.6 percent higher than the 37.5% in 2017, moving it up from the second highest to the first place. The option “The diamond industry should take actions to prevent humanitarian and environmental problems”, the most common response in 2017 at 42.3%, came in second in 2021 at 36.2%. In 2021, the third most common answer was “Consumers should check where and how the diamond was mined and cut, at the time of purchase” with 31.4%. This option was selected by 34.3% of the respondents in 2017. In both surveys, the proportion of "Nothing should be done" was low with 1.8% in 2021 and 5.4% in 2017.

The comments under the option “Other” in 2021 included “Although it would take time, we should eliminate the idea that diamond jewelry is valuable”, “We should abolish the trend that people think diamonds are rare and valuable”.

FIGURE 15: WHAT SHOULD WE DO?

(Multiple answers allowed)



* Options newly added in the 2021 questionnaire

Table 3: What Should We Do? (Multiple answers allowed)

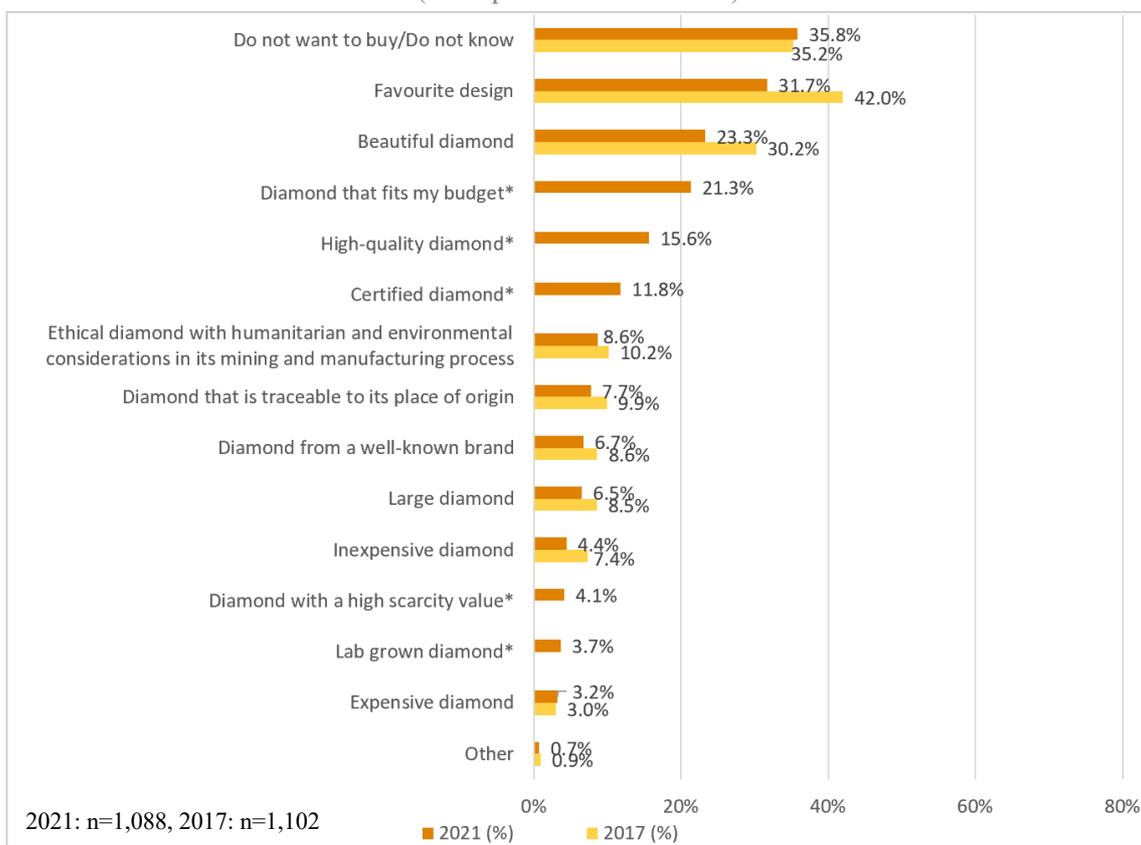
	2017 (number)	2017 (%)	2021 (number)	2021 (%)	2021(%) - 2017(%)	p-value
Total	461	100	456	100		
Consumers should buy a diamond with a third party certificate	173	37.5	206	45.2	7.6	<0.05
The diamond industry should take actions	195	42.3	165	36.2	-6.1	0.057
Consumers should check where and how the diamond was mined/cut	158	34.3	143	31.4	-2.9	0.347
Stores should disclose the information	N/A	N/A	142	31.1	N/A	N/A
The diamond industry should not sell diamonds with such problems	160	34.7	120	26.3	-8.4	<0.05
Some actions should be taken, but not sure what to do	73	15.8	69	15.1	-0.7	0.768
Consumers should boycott diamonds	55	11.9	49	10.7	-1.2	0.571
Nothing should be done	25	5.4	8	1.8	-3.7	<0.05
Consumers should buy lab grown diamond	N/A	N/A	49	10.7	N/A	N/A
Other	3	0.7	3	0.7	0	N/A

Data were analyzed using Chi Square test. P-value was not calculated when an expectation value was small.

Regarding the question “If you buy a diamond in the future, what kind of diamond would you buy?” (Multiple answers allowed), the most common answer in 2021 was “I do not want to buy / Do not know”, selected by 35.8% of the respondents. The proportion was almost the same in 2017 at 35.2%. The most common answer in 2017 was “Favorite design” with 42.0%, and placed second in 2021 with 31.7%. 8.6% and 10.2% of the respondents selected “Ethical diamond with humanitarian and environmental considerations in its mining and manufacturing process”, in 2021 and 2017 respectively. Similarly, “Diamond that is traceable to its place of origin” was selected by 7.7% and 9.9%, in 2021 and 2017 respectively. The comments under the option “Other” in 2021 included “Excellent function”, “Traceable items like you can locate the mining area or provided with tangible evidence,” and “I would discuss with my wife.”

FIGURE 16: WHAT KIND OF DIAMOND WOULD YOU BUY?

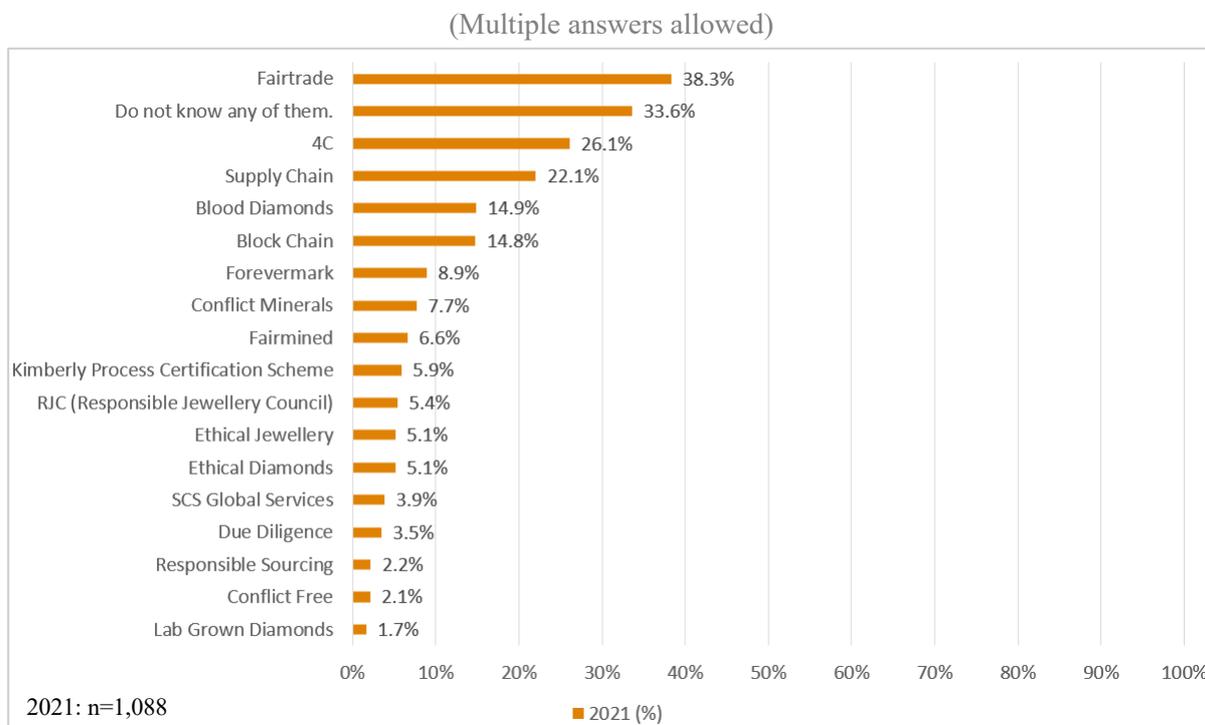
(Multiple answers allowed)



* Options newly added in the 2021 questionnaire

In 2021, we asked the respondents if they knew the terms related to diamond and/or responsible resources, that were listed in the questionnaire (Multiple answers allowed), and 38.3% of them answered that they knew “Fairtrade”. This was followed by “Do not know any of them” with 33.6%, “4C” with 26.1%, and "Supply Chain" with 22.1%. Less than 10% of the respondents knew the terms placed lower than sixth, for each, notably “Conflict Minerals”, “Kimberly Process Certification Scheme”, “RJC (Responsible Jewellery Council)”, “Ethical Jewelry”, and “SCS Global Services”.

FIGURE 17: CONSUMER AWARENESS OF TERMS RELATED TO DIAMOND AND/OR RESPONSIBLE SOURCING



2. Mail survey of diamond jewelry companies

2.1. Methodology

This survey targeted diamond jewelry companies which sell diamonds in Japan, including wholesalers and retailers. The examples of diamond jewelry here include engagement rings, wedding rings, diamond necklaces. In the last survey in 2017, we mailed out our questionnaires to 118 companies; and this time, we selected 119 companies. In the selection process, we excluded the companies that went out of business or with unknown address from the list of companies for 2017 survey. We then added some other companies to the new list. We aimed to include large and well-known jewelry brands, as well as less-known small and medium-sized companies, as many as possible.

The questionnaire explored the awareness of issues in the diamond industry, consumer attitudes about the traceability and ethics of diamonds, corporate actions and intentions concerning the ethics of diamonds, understanding of the Kimberly Process Certification Scheme and opinions relating to it, the awareness of diamond-related terms, and the expectations from Diamonds for Peace (Appendix3).

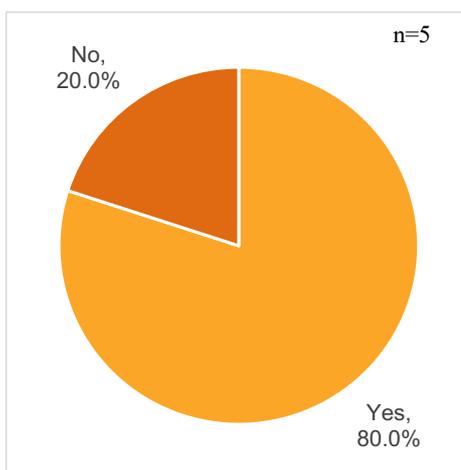
We printed a QR code on the questionnaire so that companies could respond online. A questionnaire, together with a postage-paid return envelope, was mailed to each company, addressed to its public relations manager. We sent out the questionnaires in October 2021. As the response rate did not reach 5% at two weeks after the mailout, we sent postcard reminders to non-responders. We stopped accepting answers four weeks after the reminders. Descriptive analysis was applied to summarize data and see patterns.

2.2. Results

We received five responses from the 119 targeted companies – the response rate was 4.2%. We were unable to receive two other responses from the post office in time, and those were returned to the senders. One of the 119 mailing addresses was invalid. As the response rates were low both in 2017 and 2021, we did not compare the results between the two surveys.

Among the five companies, 80% answered that they thought there were humanitarian and/or environmental issues related to diamonds.

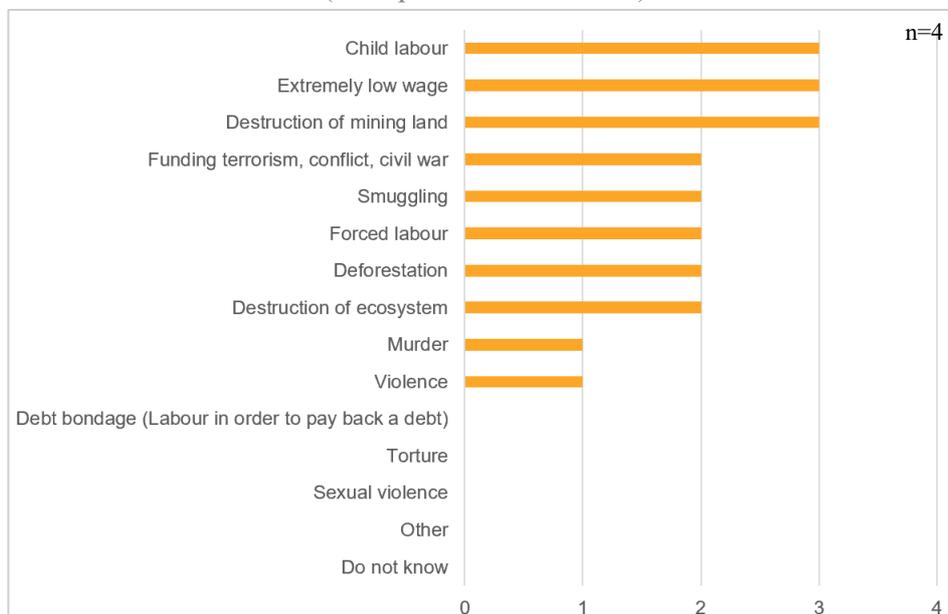
FIGURE 18: EXISTENCE OF DIAMOND RELATED ISSUES



We asked the four companies, which answered yes, what kinds of problems were occurring (Multiple answers allowed). While “Child labor”, “Extremely low wages” and “land destruction” were selected by three companies, “Sexual violence”, “Torture” and “Debt bondage” were not selected by any companies. "Violence" and "Murder" were selected by a single company.

FIGURE 19: CURRENT ISSUES RELATED TO DIAMONDS

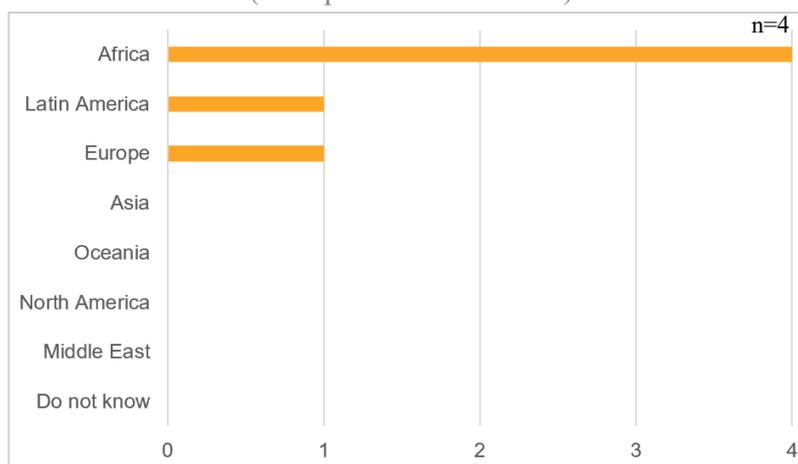
(Multiple answers allowed)



All four companies selected Africa as one of the areas where the issues relating to diamonds were occurring. Two of the companies specifically reported “Central Africa” and “Angola and Russia”.

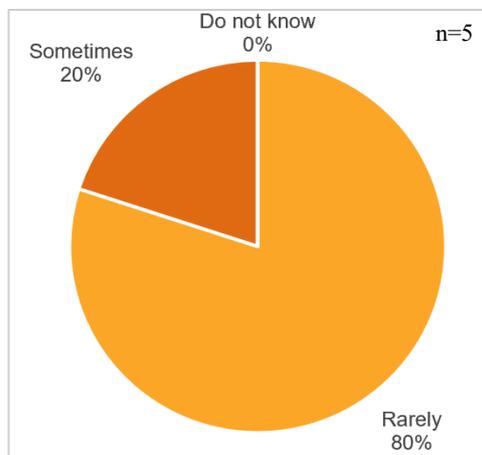
FIGURE 20: AREAS OF PROBLEMS OCCURRING

(Multiple answers allowed)



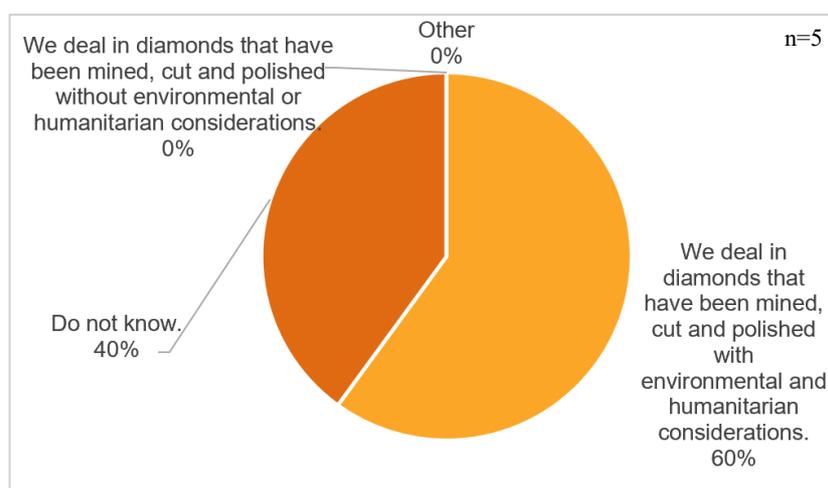
We asked if the companies received inquiries from their customers about the traceability (the information on the origins and cutting/polishing factories) and the ethics of diamonds. Four companies answered that they were “Rarely” asked such questions, and one company answered that they “Sometimes” received such questions. The company which selected “Sometimes” added that they received such questions about five times per month.

FIGURE 21: CUSTOMERS' INQUIRIES



The question then touched upon humanitarian and environmental considerations for the diamonds they dealt in. 60% answered that they dealt in diamonds that have been mined, cut and polished with environmental and humanitarian considerations, while 40% answered “Do not know”. No company selected “We deal in diamonds that were mined, cut and polished without environmental or humanitarian considerations”.

FIGURE 22: HUMANITARIAN AND ENVIRONMENTAL CONSIDERATIONS



Following the above-mentioned question, we asked the reasons behind the answers (Multiple answers allowed). The KP Certificate Scheme was the most common reason behind why the companies answered that they dealt in diamonds that have been mined, cut and polished with environmental and humanitarian considerations. The reason behind the selection “Do not know” was that the companies did not know where the diamonds were mined, cut, and polished.

The reasons why the three companies answered that they dealt in diamonds that have been mined, cut and polished with environmental and humanitarian considerations (Multiple answers allowed):

- We deal in diamonds that are certified by the Kimberley Process. (3 companies)
- We deal in diamonds with certificates that show their countries of origin. (2 companies)
- We directly deal with diamond cutting and polishing factories (2 companies)
- Suppliers say that the diamonds are not conflict diamonds. (1 company)
- We directly deal with diamond mines. (1 company)
- We deal in diamonds certified as ethical by a third-party. (1 company)

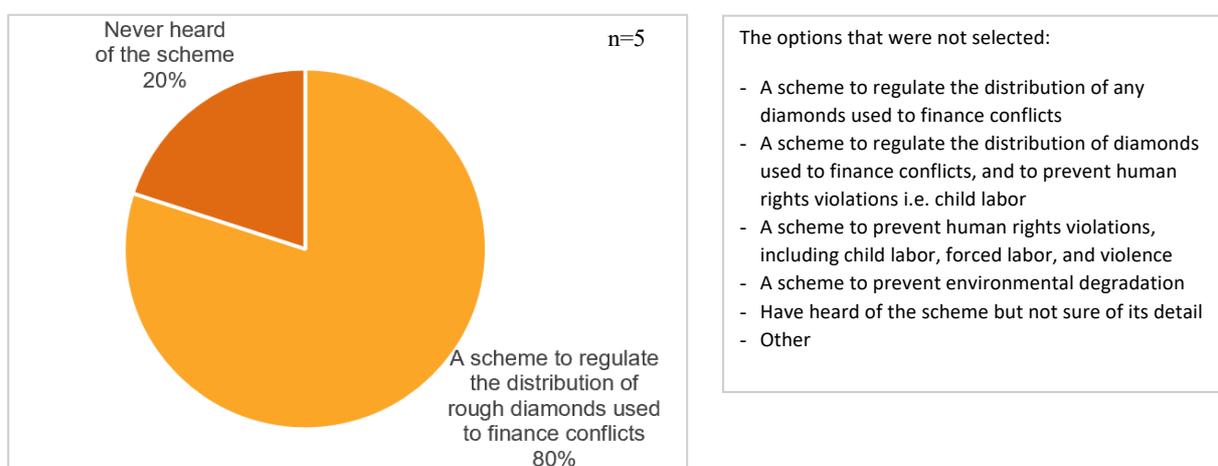
The reasons why the two companies answered that they did not know whether the diamonds were mined, cut and polished with environmental and humanitarian considerations (Multiple answers allowed):

- We do not know the diamonds' place of origin. (2 companies)
- We do not know where the diamonds were cut or polished. (2 companies)

The two companies which answered “We deal in diamonds with certificates that show their countries of origin” were asked the country names, and one of them answered “Russia”. Also, the company which answered “We directly deal with diamond mines” was asked the country name, and the answer was “Botswana”.

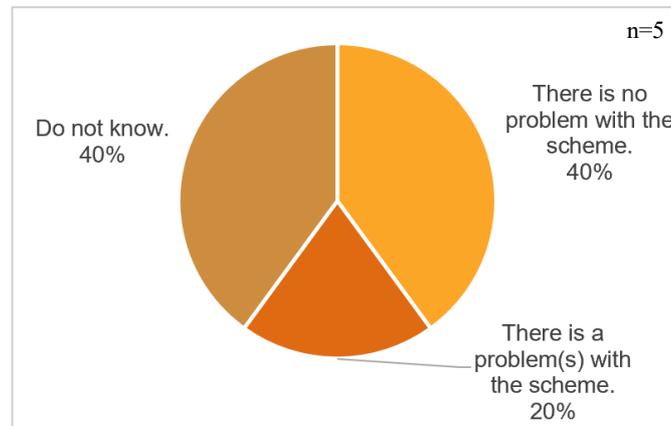
We asked the five companies to select the correct explanation of the KP Certification Scheme from the options given. 80% selected “A scheme to regulate the distribution of rough diamonds used to finance conflicts”, while one of them selected “Never heard of the scheme”.

FIGURE 23: UNDERSTANDING OF THE KIMBERLY PROCESS CERTIFICATION SCHEME



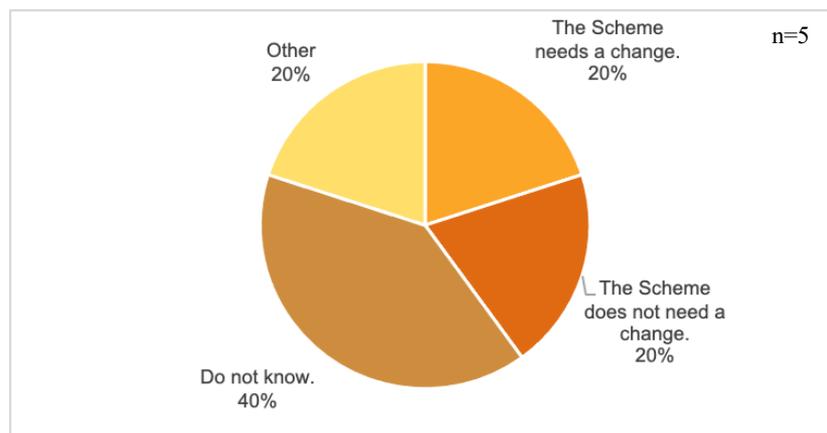
We asked about their attitudes towards the KP Certification Scheme, and 40% answered “There is no problem with the scheme”. 40% answered “Do not know.” 20% answered “There is a problem(s) with the scheme”, mentioning “The scheme only regulates the distribution of rough diamonds”.

FIGURE 24: RECOGNITION OF A PROBLEM IN KP



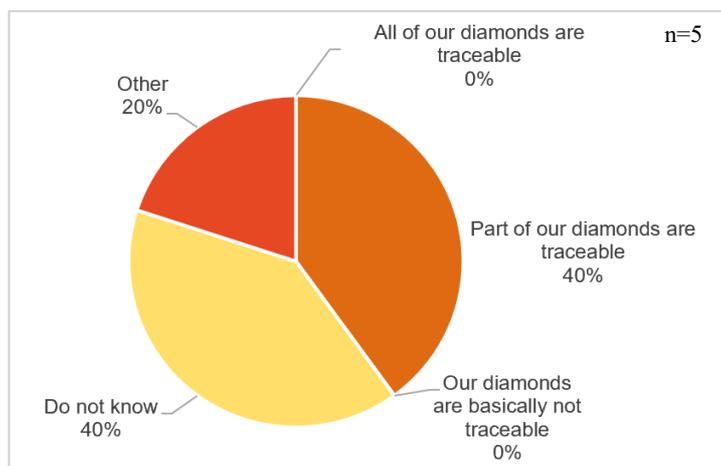
We also asked if the Scheme requires a change, and 20% answered it was required. Another 20% answered it was not required, and 40% answered “Do not know”. The comment under the option “Other” was “The System of Warranties is going to be changed and further strengthened”.

FIGURE 25: KP REQUIRES A CHANGE?



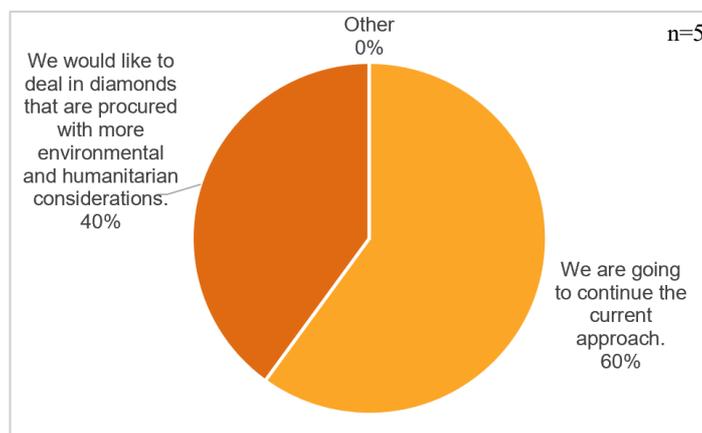
We asked the companies about the traceability of the diamonds they dealt in. 40% answered a part of their diamonds were traceable, and 40% answered that they did not know. 20% selected “Other”, mentioning “A part of our diamonds are traceable to the countries of origin, but not to the mines”.

FIGURE 26: TRACEABILITY OF THE DIAMONDS



We asked about the intentions of dealing in diamonds with humanitarian and environmental considerations. 60% selected “We are going to continue the current approach”, while 40% selected “We would like to deal in diamonds with more environmental and humanitarian considerations”. The latter group were then asked about their current approaches with regard to humanitarian and environmental considerations. One of them mentioned “We would like to deal in diamonds [with more environmental and humanitarian considerations], but there are no other options than we have now”, and the other mentioned “We purchase diamonds directly from site holders as much as we can”.

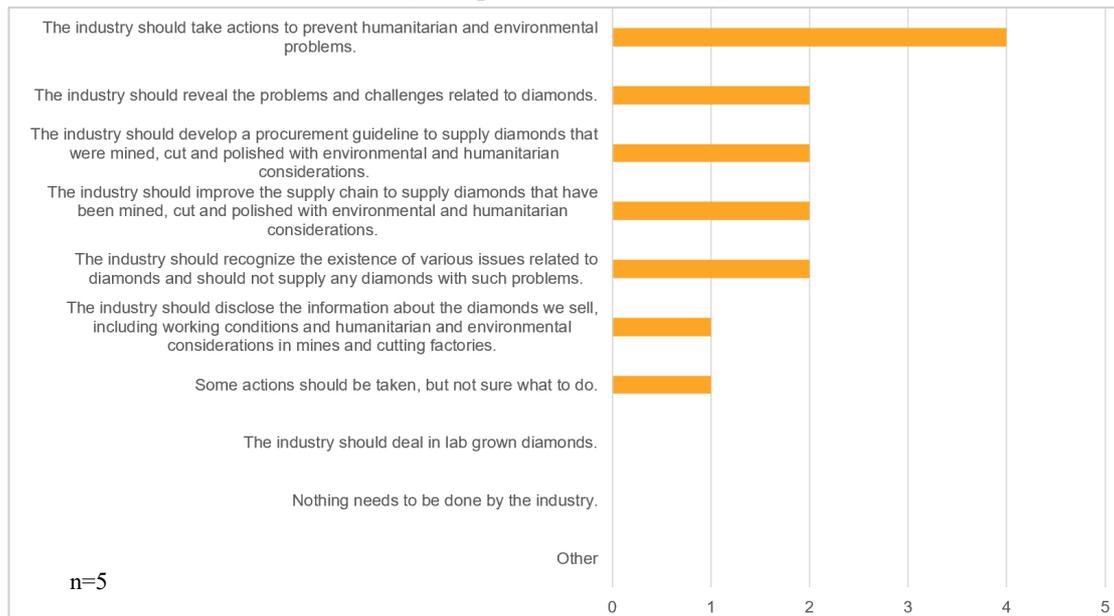
FIGURE 27: INTENSIONS ON HUMANITARIAN AND ENVIRONMENTAL CONSIDERATIONS



The five companies were asked what the diamond industry should do in regard to environmental and humanitarian considerations (Multiple answers allowed). The most common answer was “The industry should take actions to prevent humanitarian and environmental problems”, selected by 80%. None of them selected “The industry should deal in lab grown diamonds” or “Nothing needs to be done by the industry”.

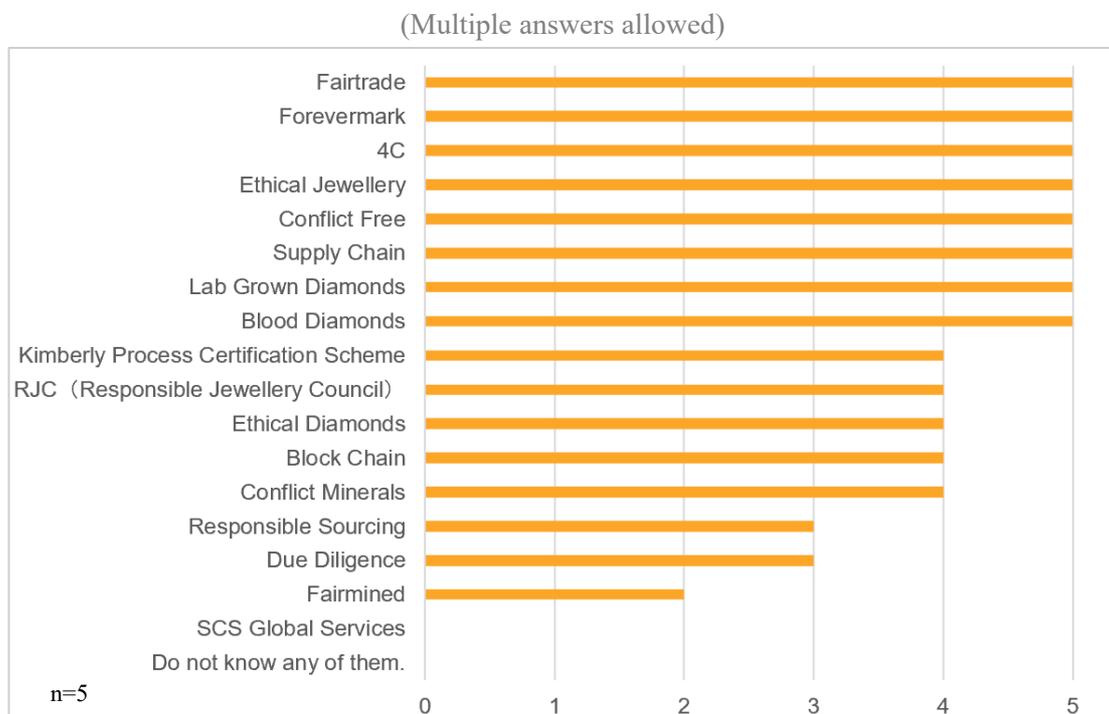
FIGURE 28: WHAT DOES THE INDUSTRY SHOULD DO?

(Multiple answers allowed)



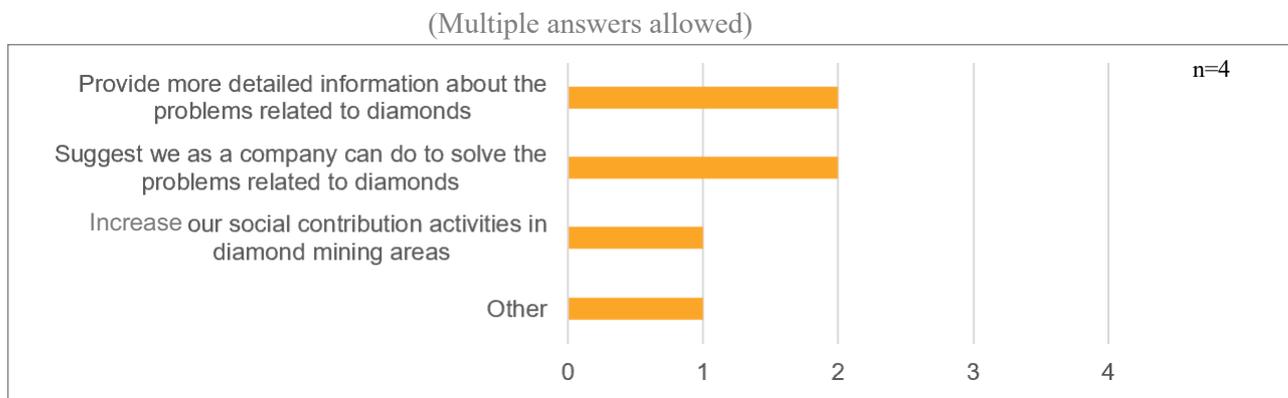
Regarding the question about the diamond-related terms (Multiple answers allowed), all companies knew “Fairtrade”, “Forevermark”, “4C”, “Ethical jewelry”, “Conflict Free”, “Supply Chain”, “Lab Grown Diamonds” and “Blood Diamonds”. On the other hand, only two companies knew "Fairmined" and no one knew “SCS Global Services”.

FIGURE 29: AWARENESS OF DIAMOND-RELATED TERMS



We asked the companies what they expected from Diamonds for Peace (Multiple answers allowed), and received answers from four companies. The options “Provide more detailed information about the problems related to diamonds” and “Suggest what companies can do to solve the problems related to diamonds” were each selected by two companies. One company wrote “It is difficult to obtain the mineral resources required for economic activities without having negative impacts on the environment. Even lab grown diamonds consume a lot of energy. We expect the organization not to damage the image of diamonds too much.”

FIGURE 30: EXPECTATIONS TO DIAMONDS FOR PEACE



3. Mystery shopping survey of diamond jewelry companies

3.1. Methodology

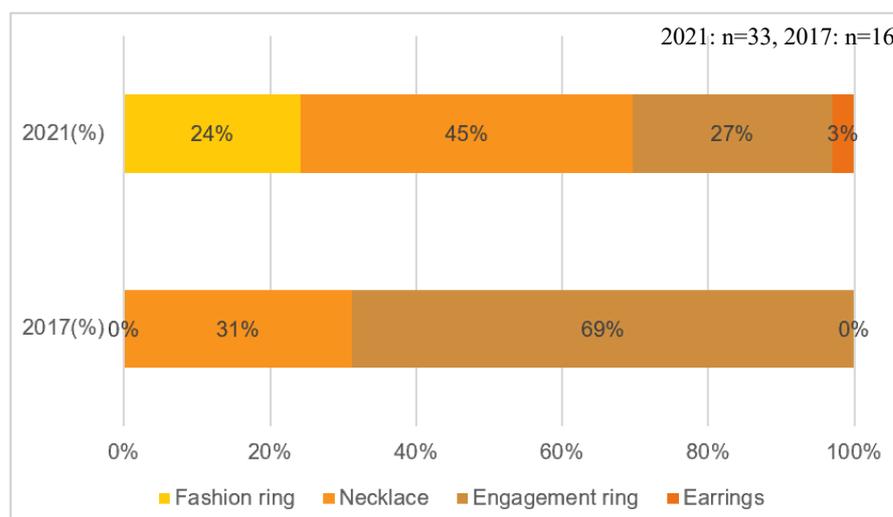
This survey targeted diamond jewelry companies who sell diamonds in Japan, including wholesalers and retailers, and particularly selected diamond jewelry brands who have stores in Tokyo metropolitan area – Tokyo, Chiba, Saitama, and Kanagawa prefectures. The examples of diamond jewelry here include engagement rings, wedding rings, diamond necklaces. We selected 16 and 33 brands in 2017 and 2021, respectively. In the selection process, we focused mainly on large and globally well-known jewelry brands as well as the brands that are famous in Japan. Based on the brand list for the 2017 survey we developed earlier, we excluded some brands that did not mainly deal in diamond jewelry and added some other brands.

We employed a mystery shopping approach to obtain responses from the sales staff whilst minimizing the observation bias. The investigators, or the mystery shoppers, were volunteers for Diamonds for Peace, and a total of five and six of them participated in the surveys in 2017 and 2021 respectively. The investigators prepared themselves by reading the guidelines which explained the purpose, procedures, questions, and precautions of the survey. They then visited each targeted store, acting as real customers. Each investigator selected a piece of diamond jewelry of which a salesperson seemed to have detailed information, as he/she wanted to sell the item, such as an item that was displayed in an eye-catching place or significantly expensive. They asked questions about the jewelry’s basic information (i.e., price and 4Cs), the traceability, and the ethics of the diamond(s) used. After each visit, the investigators input the data to the online format prepared for this survey. The anonymity of respondents and stores was preserved, as we did not obtain the identity of respondents, and secured the other data obtained in a folder to which only limited members of DFP have access.

3.2. Results

We visited a total of 33 stores in the 2021 survey, and 16 in 2017. The types and ratios of targeted jewelry in 2021 were as follows: 45% necklaces, 27% wedding rings, 24% fashion rings, and 3% earrings. In 2017, 69% wedding rings, and 31% necklaces.

FIGURE 31: TYPES OF TARGETED DIAMOND JEWELRY



The following table shows the 4Cs (Carat, Color, Clarity, and Cut) of and metal used for the targeted diamond jewelry. Some brands did not know about the Cut grade of the diamond used for the jewelry both in 2021 and 2017, whereas almost all brands answered the other questions.

We categorized the answers by what kind of grade the sales person gave with. “No grade” meaning the sales person does not know the grade of the diamond, “original grade” means the sales person gave the answer using the brand’s own grade, and “general grade” means the sales person gave the answer using 4Cs.

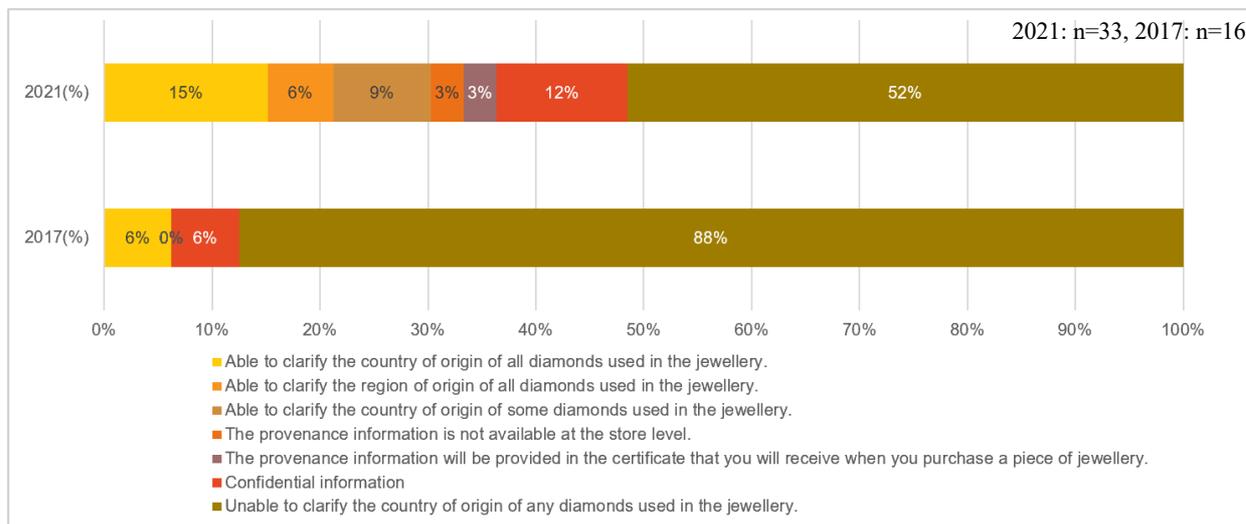
Table4: The 4Cs of the diamond and the metal used in the targeted jewelry

(2021: n=33, 2017: n=16)

Diamond’s grade – Carat Weight		2017	2021
Responses with	No grade	0%	3%
	Original grade	0%	3%
	General grade	100%	94%
Unclear		0%	0%
Diamond’s grade - Color		2017	2021
Responses with	No grade	0%	3%
	Original grade	0%	3%
	General grade	100%	94%
Unclear		0%	0%
Diamond’s grade - Clarity		2017	2021
Responses with	No grade	0%	3%
	Original grade	0%	3%
	General grade	100%	91%
Unclear		0%	3%
Diamond’s grade - Cut		2017	2021
Responses with	No grade	0%	3%
	Original grade	0%	3%
	General grade	81%	76%
Unclear		19%	18%
Type of metal used		2017	2021
Responses		100%	100%
Unclear		0%	0%

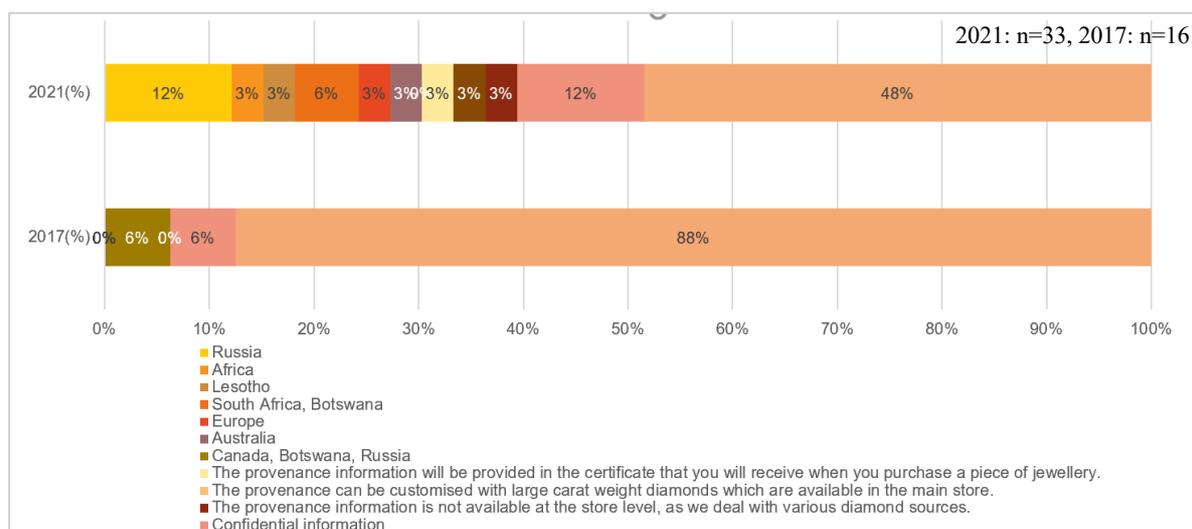
For each piece of targeted jewelry, we asked about the country of origin of the diamond(s) used. In 2021, 52% of the brands did not know the country of origin of any diamonds used in the jewelry, which decreased by 36 percent from 88% in 2017. In contrast, 15% of brands knew the country of origin of all diamonds used in the jewelry in 2021, which was a little higher than 6% in 2017.

FIGURE 32: PROVENANCE OF DIAMONDS



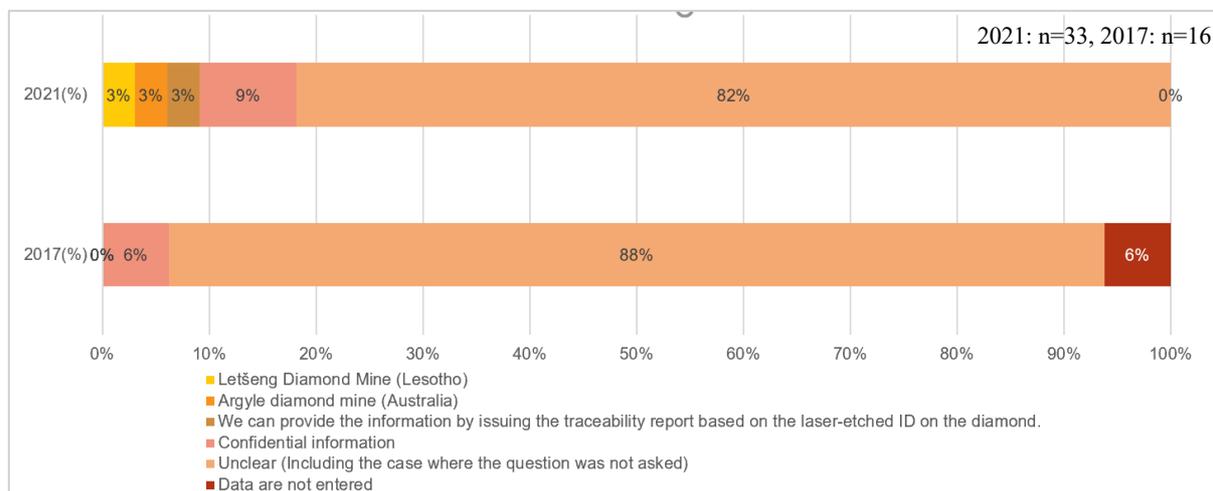
Using the same data as above, we also analyzed the country or region of origin of the targeted diamonds. 48% of the brands in 2021 did not know either the country or region of origin, which decreased by 40 percent from 88% in 2017. In 2021, 12% answered “Russia”, 6% answered “South Africa and Botswana”, 3% answered “Africa”, “Lesotho”, “Europe”, “Australia”, “The provenance information will be provided in the certificate that you will receive when you purchase a piece of jewelry”, “The provenance can be given with large carat weight diamonds which are available in the main store” and “The provenance information is not available at the store level, as we deal with various diamond sources” respectively, and 12% answered that the information was confidential. In 2017, 6% answered “Canada, Botswana, Russia”, and “Confidential information” respectively. Here the answers were allocated to the corresponding countries or regions, even when the brands knew only the country or region of origin of a part of the diamonds used in the targeted jewelry.

FIGURE 33: COUNTRY/REGION OF ORIGIN



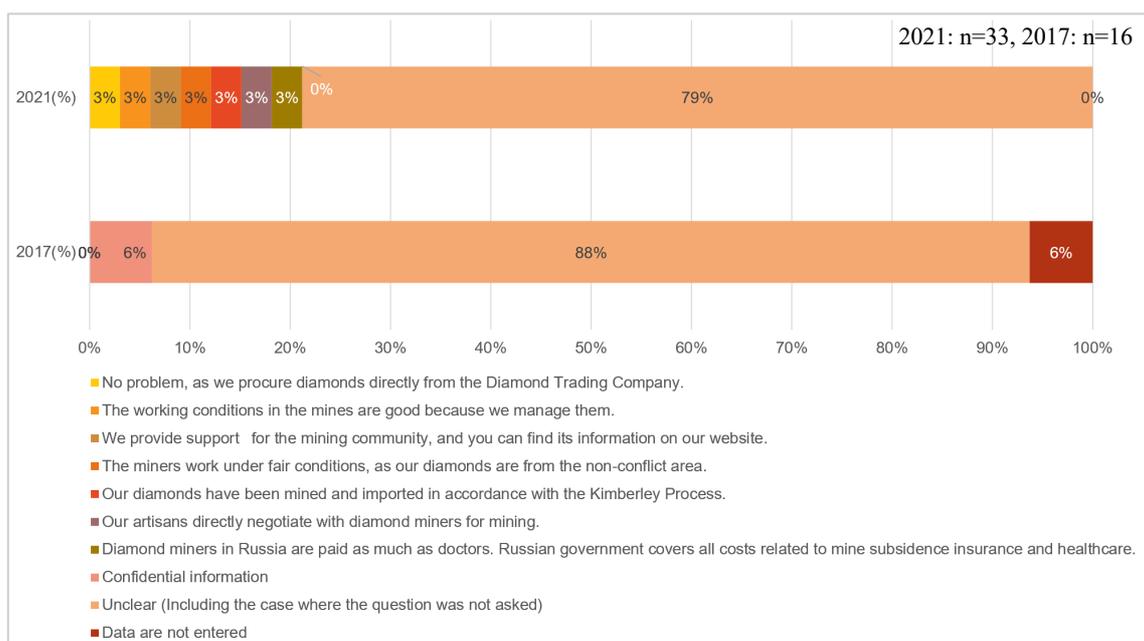
Regarding the name of the mines where the diamonds used in the targeted jewelry were mined, 82% of the brands in 2021 did not have the information, while the ratio was 88% in 2017. In 2021, 3% answered “Letšeng Diamond Mine” in Lesotho, “The Argyle Diamond Mine” in Australia, and “We can provide the information after getting the traceability report based on the laser-etched ID on the diamond”. When a brand knew nothing about the provenance information of the targeted diamond(s), the investigator did not ask further detailed questions. Therefore, such cases were categorized under “Unclear”. The same applies to the following questions.

FIGURE 34: DIAMOND MINES



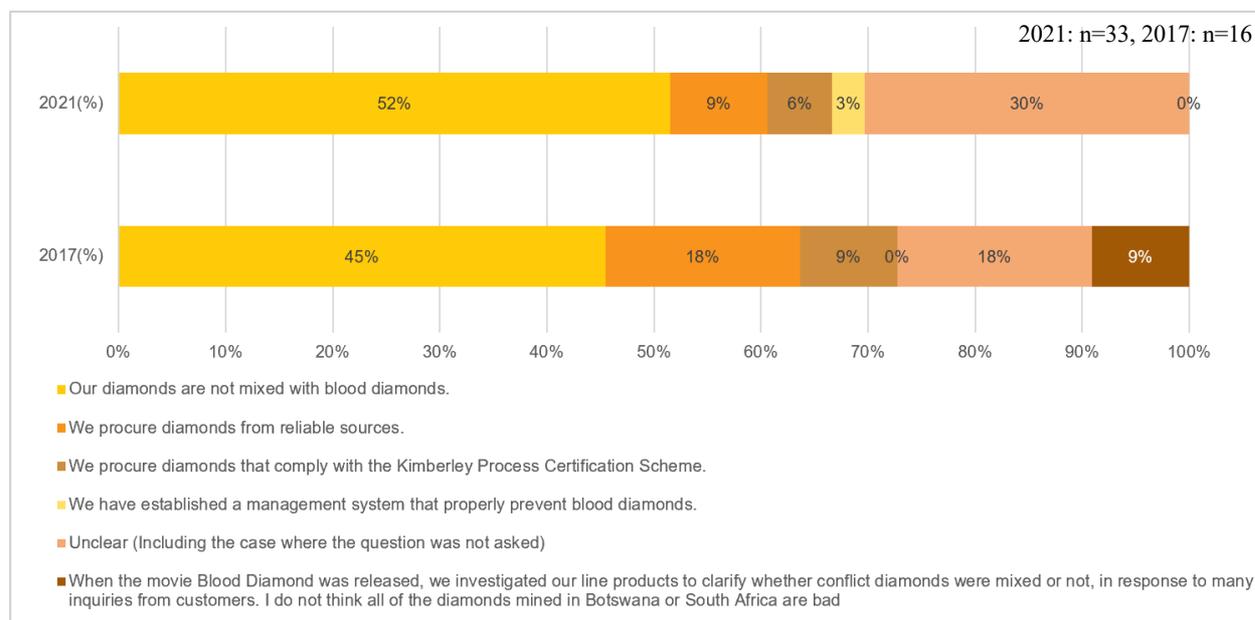
Regarding the working conditions in the diamond mines, 79% of the brands in 2021 had no information, which decreased by nine percent from 88% in 2017. In 2021, 3% answered “No problem, as we procure diamonds directly from the Diamond Trading Company”, “The working conditions in the mines are good because we manage them”, “We provide support for the mining community, and you can find its information on our website”, “The miners work under fair conditions, as our diamonds are from the non-conflict area”, “Our diamonds have been mined and imported in accordance with the Kimberley Process”, respectively.

FIGURE 35: WORKING CONDITIONS IN THE MINES



When the investigators said that they were concerned as to whether the diamonds used in the jewelry were mixed with blood diamonds, 52% of the brands in 2021 answered “Our diamonds are not mixed with blood diamonds”, which increased by seven percent from 45% in 2017. The ratios of those who answered “We procure diamonds from reliable sources” was 9% and 18%, in 2021 and 2017 respectively. The ratio of the response “We procure diamonds that comply with the Kimberley Process Certification Scheme” was 6% in 2021 and 9% in 2017. The ratio of the response “We have established a management system that properly prevent blood diamonds.” was 3% in 2021 and 0% in 2017. The ratio of the response “Unclear (Including the case where the question was not asked)” was 30% in 2021 and 18% in 2017. The ratio of the response “When the movie Blood Diamond was released, we investigated our line products to clarify whether conflict diamonds were mixed or not, in response to many inquiries from customers. I do not think all of the diamonds mined in Botswana or South Africa are bad” was 0% in 2021 and 9% in 2017.

FIGURE 36: CONTAMINATION OF DIAMONDS

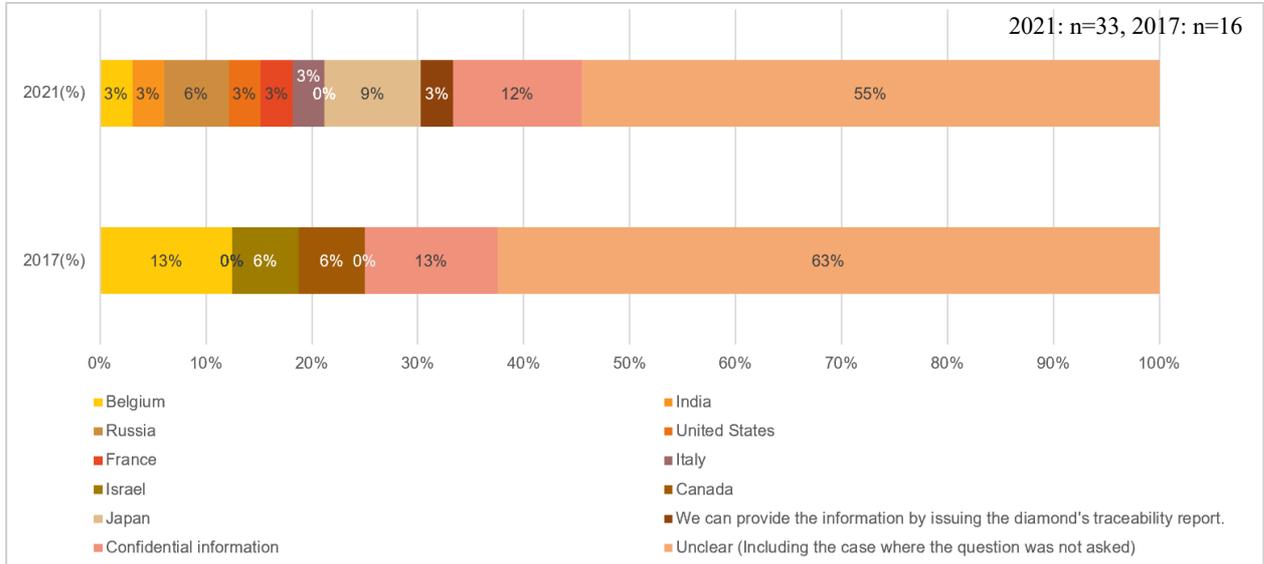


Additional comments by sales persons about the provenance information of diamonds

- “We, as an expert in the diamond industry, think that the beauty of diamonds should not be determined by only the 4Cs, the mining environments also have an influence on it”
- Q : It’s very rare that diamonds are mined in Europe, isn’t it?
A : Since the issues of human rights violations in Africa became a public concern in France, our company took the problem seriously and shifted to European mines.
- Q : I’m worried that the diamonds in this jewellery were mixed with blood diamonds.
A : I think there’s no problem, as we import the items from the official sourcing channel.
- (When the investigator said he/she wanted a responsibly sourced diamond(s) with reliable traceability, the salesperson answered) “I recommend you to choose a diamond(s) based on its cut, clarity, and colour, rather than its place of origin.
- (When the investigator said he/she wanted a responsibly sourced diamond(s) with reliable traceability, the salesperson answered) “Usually, the provenance of diamonds is unknown, and it has no effect on the quality of diamond products. I would recommend you to evaluate the quality based on the 4Cs.

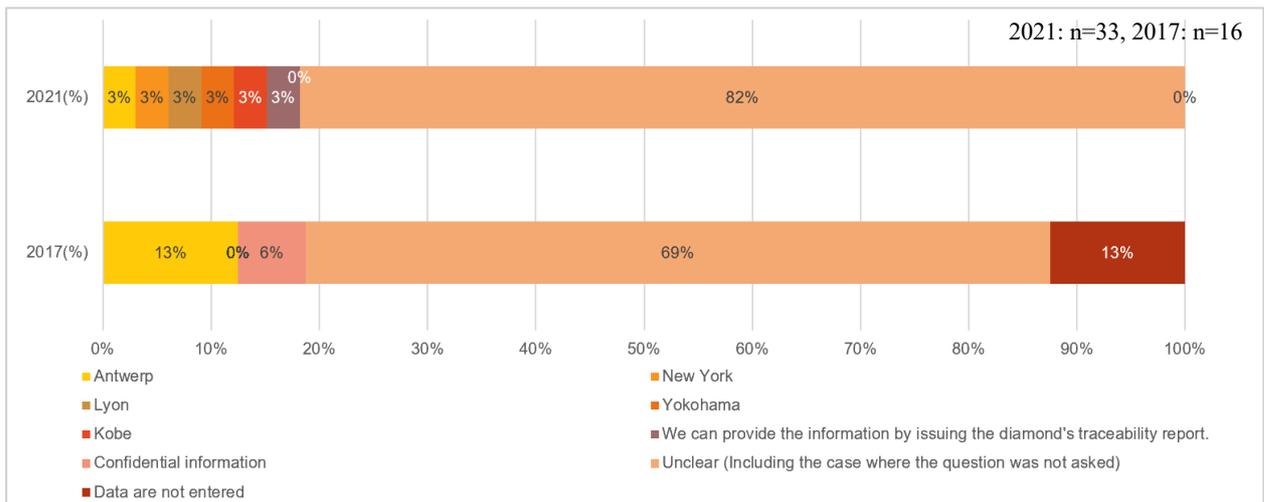
In the 2021 survey, 55% of the brands did not know in which country the diamond(s) was polished and cut. The ratio decreased by eight percent from 63% in 2017. Other responses in the 2021 survey were as follows: “Confidential information”, “Japan”, “Russia”, “Belgium”, “India”, “United States”, “France”, “Italy”, and “We can provide the information after getting the diamond's traceability report”. Responses in 2017 included: “Confidential information”, “Belgium”, “Israel”, and “Canada”.

FIGURE 37: COUNTRIES OF CUTTING AND POLISHING



Regarding the city where the diamond(s) was cut and polished, 82% of the brands in 2021 did not have the information, which increased from 69% in 2017. Other responses in the 2021 survey included: “Antwerp”, “New York”, “Lyon”, “Yokohama”, “Kobe”, and “We can provide the information after getting the diamond's traceability report”. In the 2017 survey, 13% of the brands answered “Antwerp” and 6% answered “Confidential information”.

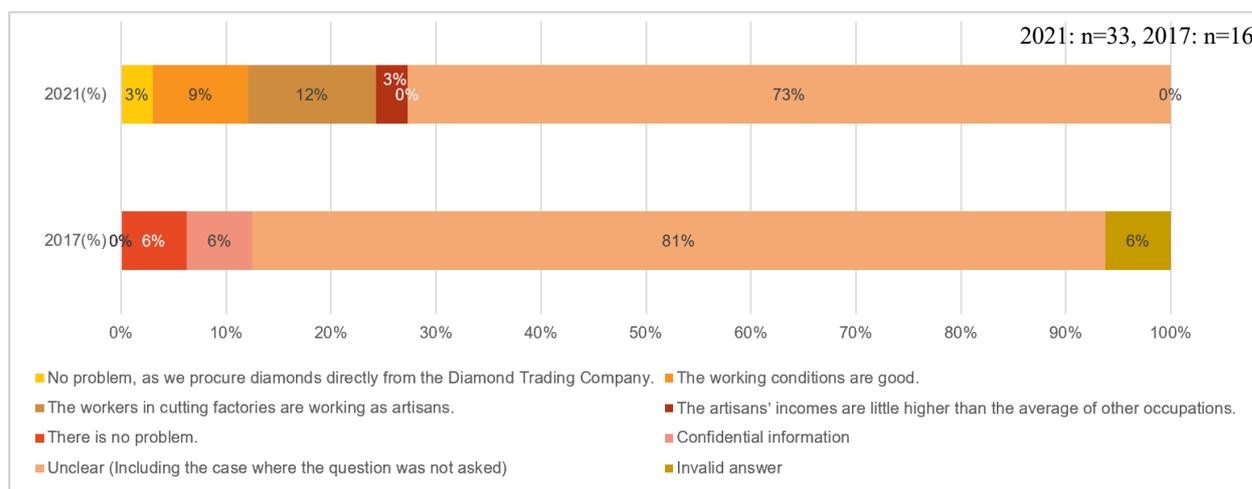
FIGURE 38: CITIES OF CUTTING AND POLISHING



As for working conditions in cutting/polishing factories, 73% of the brands in 2021 did not have the information, which decreased by 8 percent from 81% in 2017. In 2021, 12% answered “The workers in cutting factories are working as artisans”, 9% answered “The working conditions are good”, and 3% each answered “No problem, as we procure diamonds directly from the Diamond Trading Company*” and “The artisans’ incomes are a little higher than the average found in other occupations”. In 2017, 6% each answered “There is no problem” and “Confidential information”.

*Diamond Trading Company (DTC) is a group company of De Beers.

FIGURE 39: WORKING CONDITIONS AT CUTTING FACTORIES



Additional comments and observational information by the investigators in the 2021 survey

- Three years ago, the company started to disclose the country where their newly sourced diamonds were mined. This year, they have begun to clarify where the diamonds are cut/polished as well. However, the provenance information is available only with higher carat weight diamonds.
- The respondent told me that the diamond cutting factory(ies) in Vietnam proactively hired female workers.
- The traceability of diamonds seems to be achieved, but the respondent did not provide detailed information about the working conditions and how much of the benefits are given back to the workers.
- When I asked about the country of origin, the respondent immediately answered that they never dealt with conflict areas and had a direct sourcing route from South Africa.
- The store considers ethical jewellery very important and supports education and training of street children. The respondent told me they procure diamonds as well as various other gemstones, making sure that the benefits are fairly shared with local workers.
- The respondent explained the 4Cs of the diamond to me, using a chart and other materials, but he/she barely seemed to know about the provenance.
- The information about the 4Cs was quite detailed, but the respondent knew nothing about the country of origin.
- The salesperson does not even know about Blood Diamonds.
- The respondent told me that the provenance information is not available even for wedding rings.

4. Discussion

4.1. Gap between consumers' awareness and the reality

Based on the results from the consumer awareness surveys, about 40% of respondents in both years answered that there were humanitarian and/or environmental issues related to diamonds. The proportion has not significantly increased from 2017 to 2021, and about half of the respondents in both years answered that there were issues of "Extremely low wages", "Destruction of mining land", and "Smuggling". On the other hand, the proportion of respondents who selected "Funding terrorism, conflict, or civil war" decreased from 54.7% in 2017 to 44.4% in 2021, and the difference reached statistical significance. Furthermore, the awareness of certain issues, such as "Torture", "Sexual violence", and "Murder", was quite low, with significantly lower proportions in 2021 than those in 2017. As far as we know, the issues of conflict diamonds and physical and mental violence in the diamond industry remain unsolved (Global Witness, 2017; HRW, 2018; KPCS, 2019). This suggests that there is a large gap between Japanese consumers' awareness and the reality, especially the severity of diamond-related issues. Consumers might have forgotten those issues, as time passes since the release of the movie "Blood Diamond" in 2006 (Warner Bros., 2021), although there is no evidence of this.

4.2. Consumers' criteria for purchase

In the consumer awareness surveys, many respondents who had purchased a diamond(s) took into consideration the "Design", "Beauty", and "Size" of the diamond(s) at the time of purchase. On the other hand, less than 6% of them considered the "Place of origin", and only 3.1% considered the "Ethics (Humanitarian and/or environmental considerations)". This was true for both years. In the consumer survey in 2021, 31.1% of the respondents who had purchased a diamond(s) answered that they had asked a salesperson about the diamond's place of origin and humanitarian and/or environmental considerations in the mining and manufacturing process, which has significantly increased from 17.2% in the survey 2017. However, when we look at the actual questions they asked a salesperson, the most common response was <Invalid answer>, including "Nothing in particular", in both years with 46.2% in 2021 and 38.1% in 2017. Less than 10% of them wrote questions about humanitarian and/or environmental considerations, in both years. Thus, we cannot conclude that there is a significant increase in the percentage of consumers who have really asked those questions at the stores.

Furthermore, in both surveys, many respondents answered that they would choose a diamond(s) with their "Favorite design" if they were to buy one in the future with the ratio of 31.7% in 2021 and 42.0% in 2017. Only about 10% or less of the respondents answered that they would choose an "Ethical diamond with humanitarian and environmental considerations in its mining and manufacturing process" or a "Diamond that is traceable as to its place of origin", in both surveys. This is in line with the results from the mail survey of the diamond jewelry companies, where only one of the five companies answered that they received inquiries from customers about the traceability or the ethics of diamonds.

Therefore, the results suggest that the majority of consumers do not prioritize the traceability or the ethics of diamonds as one of their criteria in diamond purchases. Considering that about 40% of the respondents in each survey answered that there were humanitarian or environmental issues related to diamonds, the results show that the knowledge does not necessarily lead them directly to ethical intention or actual final behavior change in diamond purchases. This supports the results from a study in the U.K. that identified and investigated the gap between awareness and actual behavior in ethical purchases (Carrigan & Attalla, 2001).

Based on the Stages of Change (Matsumoto, 2019), a behavior change occurs in a process "precontemplation → contemplation → preparation → action → maintenance." Some more interventions are required to actually change purchasing behaviors among consumers who are in the

stage of “contemplation” or “preparation”, such as developing and introducing a guidance tool for asking ethical questions in diamond purchases.

4.3. Consumers’ expectation for certification systems and their low awareness and understanding

45.2% of the respondents in the consumer awareness survey in 2021 answered “Consumers should buy a diamond with a certificate that shows the diamond was produced in an ethical manner, with humanitarian and environmental considerations in its mining and manufacturing process”, if issues related to diamonds exist. This is increased from 37.5% in the 2017 survey (a statistically significant increase).

On the other hand, less than 5% of respondents were aware of the certificate systems with ethical criteria, including Responsible Jewellery Council and SCS Global Service. Despite the high awareness of the term “Fairtrade” with 38.3%, Fairtrade does not have certification for diamonds yet.

It is okay for consumers to use a certification as one of their judging criteria. However, consumers need to know what the certificate is about and to consider whether a particular certificate is suitable for making their own decisions.

4.4. The companies’ lack of knowledge for diamond related schemes

The study also identified that even diamond jewelry companies do not correctly understand the diamond-related schemes. In the mystery shopping survey of diamond jewelry companies, some brands mentioned the Kimberley Process (KP) or the Diamond Trading Company as the evidence of good working conditions in the diamond mines. Additionally, none of the salespersons mentioned the existing schemes that include ethical criteria for diamonds. Similar results were obtained in the mail survey of diamond jewelry companies. In this survey, 80% of the participating companies correctly answered that the Kimberley Process Certification Scheme is “A scheme to regulate the distribution of rough diamonds used to finance conflicts”. Yet, all companies, which answered that they dealt in diamonds that have been mined, cut and polished with environmental and humanitarian considerations, selected the answer “We deal in diamonds that are certified by KP” as the evidence. The results suggest that some diamond jewelry companies have a lack of knowledge about the issues with the KP and other schemes related to diamonds.

Companies which sell diamonds in Japan usually import polished diamonds instead of rough diamonds. According to the Japanese government trade statistics, the imported polished diamonds excluding industrial diamonds amounted to around 1,540,000 carat weight compared to the imported rough diamonds excluding industrial diamonds which amounted to around 27,000 carat weight in 2021.

When a company imports rough diamonds to Japan, the custom checks the Kimberley Process certificate according to the Foreign Exchange and Foreign Trade Act. On the other hand, it is not required for the custom to check the KP certificate when a company imports polished diamonds. Customarily, the invoice attached with imported polished diamonds says they are certified with KP but it is difficult to check its authenticity because KP certificates are not attached.

Furthermore, the definition of a conflict diamond by KP is “rough diamonds used to finance wars against governments,” which has nothing to do with humanitarian and environmental considerations.

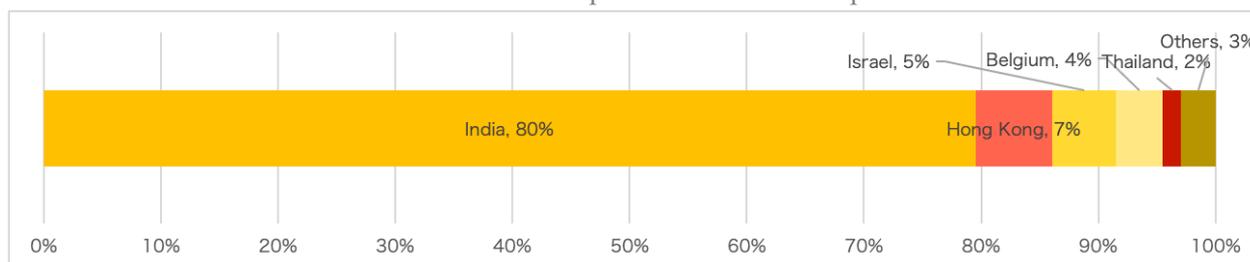
Taking all the above into consideration, the only prerequisite for any business/company not to deal in diamonds is that they fall under the definition of a conflict diamond set by KP. The claims such that the diamonds do not have any humanitarian or environmental issues because they are certified by KP are false statements.

4.5. Limited information on traceability

The proportion of companies, that did not know the country of origin of all the diamond(s) used in the targeted jewelry, decreased by 36 percent from 88% in the 2017 mystery shopping survey to 52% in the 2021 survey. The results suggest that a certain number of companies have improved the traceability of their diamonds.

However, some doubt remains. More than 90% of diamonds are polished in India (Natural Diamond Council, 2021) according to the Natural Diamond Council which consists of major diamond mining companies. At the same time, 80% of imported polished diamonds excluding industrial diamonds into Japan in 2021 come from India according to the Japanese government trade statistics, which is in line with what the Natural Diamond Council says.

FIGURE 40: Countries which polished diamonds imported from



On the other hand, 55% of diamond jewelry companies in the mystery shopping survey in 2021 said they did not know where their diamonds were cut and polished, 9% answered Japan, 3% answered Belgium, India, the United States, France, Italy respectively. Considering that more than 90% of the world's diamonds are polished in India and 80% of imported polished diamonds to Japan came from India, their answer "3% India" shows a huge discrepancy.

Furthermore, a very limited number of diamond jewelry companies were able to name specific diamond mines and cities where their diamonds were mined and cut, or knew about the working conditions in those places. For instance, the proportion of companies that did not have the information about the working conditions in diamond mines was 88% in 2017, which remained high at 79% in 2021. In addition to this, some companies mentioned that the working conditions in mines of their diamonds were good, as they have followed the KP or were procured from the Diamond Trading Company, a group company of De Beers. Unfortunately, they do not guarantee working conditions in diamond mines or in cutting/polishing factories.

4.6. Good practice by some companies

From the point of view of awareness on diamond related issues, some diamond jewelry companies may have a higher awareness than other companies and consumers and have been implementing their own measures. We found out that some companies targeted in the mystery shopping survey answered that they had their own system to track a part of their diamonds from the mines and polishing factories, or that they re-distribute wealth to the local workers. These results are in line with the content in the report "The Hidden Cost of Jewelry" published by Human Rights Watch in 2018. They conducted a survey targeting 13 globally well-known diamond jewelry companies, and concluded that although none of them perfectly fulfilled the responsible sourcing criteria, some companies have taken significant steps to address human rights issues in the diamond supply chain. Those efforts can be good examples for other companies.

4.7. Possibility of information sharing by using the keyword "Fairtrade"

Although there are no diamonds certified with the Fairtrade system, the awareness of the term "Fairtrade" among the Japanese population is higher than that of other terms. This suggests that we can effectively share the information related to diamonds by using this kind of well-known term. In this

modernized society, people access information using keywords in search engines and social media platforms. Therefore, for instance, by using the term “Fairtrade” with a hashtag when we share information on social media, and people who are interested in “Fairtrade” and associated topics should be able easily to access our information.

We need to keep in mind that there are some risks in information sharing, such as “Green Washing” where an organization intends to make people believe it is more environmentally friendly than it really is (Delmas & Burbano, 2011; William S. Laufer, 2003). There are also “Ethics Washing”, which is the ethic version of Green Washing (Wagner, 2019); and “Rainbow Washing” (Izzo et al., 2020) or “SDGs Washing” (DENTSU Inc., 2018), which is the version relating to the Sustainable Development Goals (SDGs). It is important to take some measures to prevent those problems by, for instance, verifying information sources and avoiding exaggerating or misleading expressions (DENTSU Inc., 2018).

4.8. Limitations of the surveys

In terms of the consumer awareness surveys, there are some limitations specific to online monitoring surveys. The Science Council of Japan (SCJ) recognizes various advantages to this type of approach and suggests effective use of it in scientific research, whilst signaling some specific limitations as follows: study participants are limited to registered participants, surveys need to be closed upon achieving target response numbers, and there usually are some unreliable responses from those who only seek points (SCJ, 2020). Due to those limitations, our surveys might not have captured the target populations of all (potential) diamond consumers in Japan. To mitigate this risk, we set some conditions in the survey system, such as the ratio between people living in Tokyo metropolitan area and other areas, and the male to female ratio. Some other measures are recommended for future studies, such as reflecting the population and sex ratio of each age group, and calculating a sample size by setting the margin of error or confidence interval.

The advantage of mail surveys is that many companies in a broad range could be reached, whereas, collection rate tends to be quite low. In our mail survey in 2021, the collection rate did not even reach five percent, which signifies that we did not achieve enough data to analyze the awareness of diamond jewelry companies which sell diamonds in Japan. It is quite likely that the companies which responded to our questionnaires had a high awareness about the issues related to diamonds even before this study.

The mystery shopping surveys targeted a single piece of jewelry among diamond jewelry products which a salesperson wanted to sell and had enough information on. Hence, the surveyors obtained no information about the other products. Also, as we selected a single store for each brand, there might have been more informed salespersons in other stores.

5. Recommendations

This study revealed the following points regarding the awareness of consumers and diamond jewelry companies in Japan about issues in the diamond industry.

Consumers

- 1) About 60% of Japanese consumers are probably unaware of the issues related to diamonds;
- 2) Even those who believe they are aware of the issues may not know the persisting issues of conflict diamonds: torture, sexual violence, and murder; which is accompanied by a decline in awareness from 2017 to 2021;
- 3) The awareness of the issues does not necessarily lead directly to ethical intention or actual final behavior in diamond purchases;
- 4) Japanese consumers have a high expectation of certification systems, despite the low awareness of the existing certification systems that include ethical criteria;
- 5) The awareness of the term "Fairtrade" among Japanese consumers is high.

Diamond jewelry companies

- 1) Issues and systems related to diamonds are not correctly understood by some diamond jewelry companies;
- 2) Some diamond jewelry companies have made efforts to improve the traceability of their diamonds, yet hardly any company know the conditions in diamond mines and cutting factories;
- 3) Some diamond jewelry companies have a high awareness of diamond-related issues and take their own actions.

Based on the above findings, this study suggests the following proposals in order to improve the future educational activities to be implemented by Diamonds for Peace.

In each educational activity, short videos and pertinent social media posts would also be effective in addition to publishing detailed articles.

For consumers

- 1) Sharing reliable information and knowledge about the diamond-related issues and schemes/systems of which consumers have low awareness;
- 2) Using well-known terms related to diamonds in order to effectively reach more consumers;
- 3) Planning and implementing interventions to change decision-making criteria and actual behaviors in diamond purchases.

For diamond jewelry companies

- 1) Sharing reliable information and knowledge about the diamond-related issues and schemes/systems, through for instance, training courses or workshops for companies;
- 2) Translating into Japanese and distributing the guidance/guidelines for responsible sourcing developed by international industry organizations
- 3) Sharing good practices on responsible sourcing by diamond jewelry companies
- 4) Providing concrete suggestions for better humanitarian and environmental considerations in their business and supply chains.

Diamonds for Peace will use the findings to improve educational activities and to be a vector of positive change in society. They will conduct similar studies and share the findings periodically, to record and understand the changes in people's awareness and behaviors, and to continuously improve their activities.

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Appendix 2: Questionnaire for the consumer awareness survey 2021

(Original questionnaire is prepared in Japanese. The below text is its English translation).

Questions about Yourself

Release Date:

Point:

Attention

- ※ Please fill out the questionnaire with precision, without rushing. Mistakes and false answers cannot be considered as proper data and newly added points will be deleted.
- ※ Based on the terms agreed, any information obtained from the survey shall not be disclosed to others. For instance, please do not post the information on an internet bulletin board or any websites.
- ※ The results from this survey will be processed into statistical data that is non-personally identifiable.
- ※ Sensitive information might be required in the questionnaire. Although the results will be statistically processed and the data could not lead to the identification of a specific individual, you do not have to participate in the survey and you can leave the questionnaire without finishing it, in case you are uncomfortable with it.
- ※ If you do not wish to participate in the survey, please decline participation by closing the browser window.

Q1. Have you ever purchased any diamonds? Please check either one of the two below.

1. Yes
2. No

Q2. For those who answered Yes in Q1, on what criteria did you base your decision to buy the diamond(s)? Please select all that apply.

1. Design
2. Size
3. Beauty
4. Brand
5. Price (Less expensive)
6. Price (Expensive)
7. Scarcity value
8. Ethics (Humanitarian and/or environmental considerations)
9. Place of origin
10. Advertisement
11. Salesperson's recommendation
12. Other ()

Q3. For those who answered Yes in Q1, when you purchased the diamond(s), did you ask a salesperson about the diamond's place of origin, and humanitarian and environmental considerations in the mining and manufacturing process? Please check either one of the two below.

1. Yes
2. No

Q4. For those who answered Yes in Q3, please tell us the actual questions you asked and the answers from salesperson. Please write them down.

Q5. Do you think there are humanitarian and/or environmental issues related to diamonds? Please check either one of the two below.

1. Yes
2. No

Q6. For those who answered Yes in Q5, which of the following problems do you think are occurring now? Please select all that apply.

1. Funding terrorism, conflict, civil war
2. Child labor
3. Smuggling
4. Forced labor
5. Extremely low wages
6. Debt bondage (Labor in order to pay back a debt)
7. Deforestation

8. Destruction of mining land
9. Destruction of ecosystems
10. Murder
11. Torture
12. Violence
13. Sexual violence
14. Do not know
15. Other ()

Q7. For those who selected any options except #14 in Q6, in which area do you think these issues are occurring? Please select all that apply.

1. Asia
2. Oceania
3. Africa
4. North America
5. Latin America
6. Middle East
7. Europe
8. Please specify countries if any ()
9. Do not know

Q8. For those who selected any options except #14 in Q6, if the issues listed in Q6 really exist, what do you think we should do? Please select all that apply.

1. Consumers should check where and how the diamond was mined and cut, at the time of purchase.
2. Consumers should buy a diamond with a third-party certificate that shows the diamond was procured in an ethical manner, with humanitarian and environmental considerations in its mining and manufacturing process.
3. Consumers should boycott diamonds.
4. Consumers should purchase lab grown diamonds.
5. Diamond jewelry stores should disclose the information about the diamonds they sell, including working conditions and humanitarian and environmental considerations in mines and cutting factories.
6. The diamond industry should recognize the existence of various issues related to diamonds and should not supply any diamonds with such problems.
7. The diamond industry should take actions to prevent humanitarian and environmental problems.
8. Some actions should be taken, but not sure what to do.
9. Nothing should be done.
10. Other ()

Q9. If you buy a diamond, what kind of diamond would you buy? Please select all that apply.

1. Favorite design
2. Large diamond
3. Beautiful diamond
4. Diamond from a well-known brand
5. Inexpensive diamond
6. Expensive diamond
7. Diamond that fits my budget
8. Diamond with a high scarcity value
9. High-quality diamond
10. Ethical diamond with humanitarian and environmental considerations in its mining and manufacturing process
11. Certified diamond
12. Diamond that is traceable to its place of origin
13. Lab grown diamond
14. Do not want to buy/Do not know

15. Other ()

Q10 Which terms do you know? Please select all that apply.

1. Fairtrade
2. Fairmined
3. Kimberly Process Certification Scheme
4. RJC (Responsible Jewellery Council)
5. SCS Global Services
6. Forevermark
7. 4C
8. Ethical Jewelry
9. Ethical Diamonds
10. Conflict Free
11. Responsible Sourcing
12. Supply Chain
13. Block Chain
14. Due Diligence
15. Conflict Minerals
16. Lab Grown Diamonds
17. Blood Diamonds
18. Do not know any of them.

This is the end of the questionnaire.

Thank you for your cooperation.

You can check the points you received in My Page.

Appendix 3: Questionnaire for the company mail survey 2021

(Original questionnaire is prepared in Japanese. The below text is its English translation).

Questionnaire

1. Do you think there are humanitarian and/or environmental issues related to diamonds? Please check either one of the two below.
Yes No

2. For those who answered Yes in Q1, which of the following problems do you think are occurring now? Please select all that apply.
Funding terrorism, conflict, civil war
Child labor Smuggling
Forced labor Extremely low wages
Debt bondage (Labor to pay back a debt)
Deforestation Destruction of mining land
Destruction of ecosystems Murder
Torture Violence
Sexual violence Do not know
Other (Please specify)

3. Where do you think these issues are occurring? Please select all that apply.
Asia Oceania
Africa North America
Latin America Middle East
Europe Do not know
Please specify countries below if any.

4. Do you receive inquiries from customers in a store and/or through phone/email about the traceability and/or the ethics of diamonds? Please select an applicable answer.
Rarely asked Do not know
Sometimes asked → about () customers per month

5. Could you tell us about humanitarian and environmental considerations for the diamonds your brand deals in? Please select an applicable answer.
We deal in diamonds that were mined, cut and polished with environmental and humanitarian considerations.
We deal in diamonds that were mined, cut and polished without environmental or humanitarian considerations.
Do not know.
Other (Please specify)

6. Could you tell us the reasons behind your answer in Q5? Please select all that apply.
We do not know the diamonds' place of origin.
We do not know where the diamonds were cut or polished.
Suppliers say that the diamonds are not conflict diamonds.
We deal in diamonds that are certified by the Kimberly Process.
We deal in diamonds with certificates that show their countries of origin.
→ The main country of origin: ()
We directly deal with diamond mines.
→ The main country of origin: ()
We directly deal with diamond cutting and polishing factories.
We deal in diamonds certified ethical by a third-party.
Other (Please specify)

7. Which one of the options below correctly explains the Kimberly Process Certification Scheme? Please select an applicable answer.

- A scheme to regulate the distribution of any diamonds used to finance conflicts
 - A scheme to regulate the distribution of rough diamonds used to finance conflicts
 - A scheme to regulate the distribution of diamonds used to finance conflicts, and to prevent human rights violations i.e. child labor
 - A scheme to prevent human rights violations, including child labor, forced labor, and violence
 - A scheme to prevent environmental degradation
 - Have heard of the scheme but not sure of its details
 - Never heard of the scheme
 - Other (Please specify)
8. Please select the option that most closely matches your brand's opinion.
- 1) Do you think there are problems with the Kimberly Process Certification Scheme?
 - There is no problem with the scheme.
 - Do not know.
 - There is a problem(s) with the scheme. (Please specify)
 - 2) Do you think the Scheme requires an amendment?
 - The Scheme needs an amendment.
 - The Scheme does not need an amendment.
 - Do not know.
 - Other (Please specify)
9. Are your brand's diamonds traceable to the original mines? Please select an applicable answer.
- All of our diamonds are traceable.
 - Part of our diamonds are traceable.
 - About () % of our diamonds are traceable.
 - Our diamonds are basically not traceable.
 - Do not know.
 - Other (Please specify)
10. Could you tell us about your brand's intention concerning humanitarian and environmental considerations for diamonds? Please select the opinion that most closely matches your brand's opinion.
- We are going to continue the current approach.
 - We would like to deal in diamonds that are procured with more environmental and humanitarian considerations.
 - Other (Please specify)
11. For those who answered "We would like to deal in diamonds that are procured with more environmental and humanitarian considerations" in Q10, please tell us about the actions you have already taken, if any.
12. What should the diamond industry do in regard to environmental and humanitarian considerations in respect to diamonds? Please select all applicable answers.
- The industry should take actions to prevent humanitarian and environmental problems.
 - The industry should reveal the problems and challenges related to diamonds.
 - The industry should develop a procurement guideline for the supply of diamonds that were mined, cut and polished with environmental and humanitarian considerations.
 - The industry should improve the supply chain for diamonds that have been mined, cut and polished with environmental and humanitarian considerations.
 - The industry should recognize the existence of various issues related to diamonds and should not supply any diamonds with such problems.
 - The industry should disclose the information about the diamonds we sell, including working conditions and humanitarian and environmental considerations in mines and cutting factories.
 - Some actions should be taken, but not sure what to do.
 - The industry should deal in lab grown diamonds.
 - Nothing needs to be done by the industry.

Other (Please specify)

13. Which terms do you know? Please select all that apply.

- Fairtrade
- Fairmined
- Kimberly Process Certification Scheme
- RJC (Responsible Jewellery Council)
- SCS Global Services
- Forevermark
- 4C
- Ethical Jewelry
- Ethical Diamonds
- Conflict Free
- Responsible Sourcing
- Supply Chain
- Block Chain
- Due Diligence
- Conflict minerals
- Lab Grown Diamonds
- Blood Diamonds
- Do not know any of them.

14. What would you like us to do? Please select all that apply.

- Provide more detailed information about the problems related to diamonds
- Suggest what we as a company can do to solve the problems on diamonds
- Increase our social contribution activities in diamond mining areas
- Other (Please specify)

15. Could you tell us your contact information for future reference and follow-up?

Company Name	
Brand Name	
Contact Person	
Email Address	
Phone Number	
Another Contact Address	

16. What kind of information would you like to receive from DFP? Please select all that apply.

- The results of the survey
- DFP Newsletters
- Other (Please specify)

Thank you for your cooperation.