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Surveying factors that influence healthcare personnel in the transition to reusable surgical gowns

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Abstract

This study surveyed 190 healthcare professionals to examine attitudes towards reusable surgical gowns, aiming to reduce medical waste. Comfort (scoring 5.32 out of 7) and misconceptions about gowns serving as personal protective equipment (87% hold this belief) are crucial influencers. External motivators, trust, emotions, and workload also impact perceptions. The study recommends enhancing reusable gown design for comfort, multifunctionality, and hygiene trust. It calls for communication strategies to normalise reusables in healthcare and urges a transition to sustainable practices.

Keywords: reuse, sustainability, circular economy, healthcare design, product development

1. Introduction

Due to their large and continuously growing scale, hospitals have become significant contributors to environmental pollution. The need for sterility in medical procedures has fostered extensive reliance on disposable items, resulting in the continuous consumption of raw materials and energy resources to produce them. Ivanović et al. (2022) quantified the single-use plastics consumption in hospitals, revealing a substantial daily consumption of 619g of plastic medical consumables per patient. Up to 49% of the disposables can be attributed to protective clothing such as gloves, body and face protection, and surgical textiles. The **operating room** (OR) contributes to these environmental burdens, comprising up to 33% of total hospital waste (Stall *et al.*, 2013). The majority of waste from the OR consists of disposables surgical supplies, protective clothing, patient drapes, and plastic packaging (Conrardy *et al.*, 2010). The butterfly model (Ellen MacArthur Foundation, 2015) offers an insightful perspective on creating circular systems in healthcare settings. Where possible, a key strategy is reusing products as long as possible, with the user's role being pivotal for proper handling and collection to ensure sustained continuity of reusable products.

The current paper contributes to insights into the motivators for **reuse in the healthcare sector**; a setting where disposables rule. Drawing upon previous research (Harding *et al.*, 2021), it delves into the opportunity of reusing textiles and protective clothing. Earlier research revealed that the transition towards reusable surgical gowns has the potential to yield a reduction in energy consumption by up to 64%, while also mitigating approximately 66% of greenhouse gas emissions. Moreover, the utilisation of reusable gowns could lead to 83% reduction in blue water consumption and a substantial 84% reduction in solid waste generation (Vozzola *et al.*, 2020). Although reusable gowns have gone out of regular use (Chinta and Veena, 2012), they have not ceased to exist. Driven by innovations in technical textiles, they continue to meet modern requirements, if not surpass them (McQuerry *et al.*, 2021). Despite these advancements, disposable gowns remain prevalent in hospitals, and healthcare personnel (HCP) often lack awareness of reusable options in the OR.

HCP are primarily engaged with medical devices used within hospital settings, making them the product users and key stakeholders whose satisfaction with the devices selected by hospital management is paramount. Additionally, Ledda et al. (2024) stress the importance of changing behaviours in OR's as a core element of greening strategies. Behaviour change interventions in this setting should be carefully selected, as resources and time are limited. Design and behavioural science must be integrated to achieve success. Behavioural design involves five phases, being: (i) identification of the problem, (ii) mapping and description, (iii) development of interventions, (iv) refinement of interventions, and (v) scaling up, launching and maintenance, as outlined by Cash et al. (2023).

1.1. Previous literature

In this pursuit, Icek Ajzen's Theory of Planned Behaviour (TPB) is employed to predict behavioural intentions, where attitudes, subjective norms, and perceived behavioural control are key determinants shaping intentions. Attitudes represent personal evaluations, subjective norms involve perceived social pressure and approval of others, and perceived behavioural control encompasses the perception of personal ability and resources (Ajzen and Schmidt, 2020). Formative research and the TPB have been used before in the healthcare sector. Lapkin et al (2015) concluded **attitude** to be the most significant predictor of medication safety and collaborative practices. A study into hand hygiene practices among nurses revealed that colleagues, supervisors, patients, and representatives from Infection Prevention played a prominent role in supporting and influencing hand hygiene compliance (**subjective norm**) (White *et al.*, 2015)**.** In a recent study (Yap *et al.*, 2023), valuable insights emerged concerning end-user's perceptions of transitioning to reusable surgical gowns. The research revealed perceptual behavioural constraints (**perceived behavioural control**) such as uncertainties pertaining to the environmental benefits, financial considerations, and functionality of a reusable surgical gown.

Throughout a literature review (2020) we expanded the initial TPB framework with other occurring drivers and barriers impeding greening strategies in healthcare. We consulted the databases Google Scholar and Web of Science, where, besides for review articles, we used the key search terms "operating room greening", "waste management", and "recycling". Nine scientific papers on sustainability in the OR have been selected (Azouz et al., 2019; Brasch et al., 2013; Campion et al., 2015; Conrardy et al., 2010; Guenther et al., n.d.; Kagoma et al., 2012a; Laustsen, 2012; et al., 2013; Wyssusek et al., 2019). The first barrier relates to **trust and safety perception**, which seems to be the major factor driving preferences for disposable gowns. It should be noted that safety took a variety of forms ranging from a sense of better barrier protection with disposables to concerns about the ability of a laundry to resterilise reusable gowns (Brasch *et al.*, 2013). Secondly, Wyssusek et al. (2019) outline the barrier of **habits** by emphasising the importance of flexibility of HCP to instigate changes in established practices. However, the intrinsic human condition is characterised by and innate sense of security in what is familiar. The third barrier pertains to the influence of **emotions**; in a comparison study by Conrardy et al. (2010), two large medical centres evaluated the implications of substituting disposable surgical products with reusable alternatives. HCP preferred reusable products to the disposable products currently in use. Notably, qualitative data provided by the participants showed the emotional dimension of their decision-making processes. Expressive statements such as "I loved wearing the gowns," and "Happy to see we are trying to save the environment" conveyed the participants' strong positive sentiment to the eco-conscious shift. The last barrier is related to **work pressure**. Research reports on the effect of the absence of strong leadership, concerns related to perceived infectious risks, lack of data, concerns about increased workload, and staff attitudes resistant to change (Wyssusek *et al.*, 2019).

Behaviour change interventions have the potential to impact individuals by either enhancing their intention or motivation to engage in a desired behaviour, or by assisting them in actualising pre-existing intentions when they already intend to do so (Ajzen and Schmidt, 2020). Hardeman et al. (2002) conducted a review study highlighting several prevalent methods employed for behaviour change, including information dissemination, persuasion, skill enhancement, goal setting, skill rehearsal, planning and implementation, and social encouragement and support.

Literature often reports on a tied link between attitude and behavioural intention (Lapkin *et al.*, 2015; Tonglet *et al.*, 2004). Therefore, in our study, we investigate the influence of drivers and barriers (the

independent variables) on attitude towards reusable surgical gowns (dependent variable). Based on the TPB and the extensions we propose, Figure 1 visualises the study design. The researchers hypothesise that each variable has a notable influence on HCP's attitude formation.

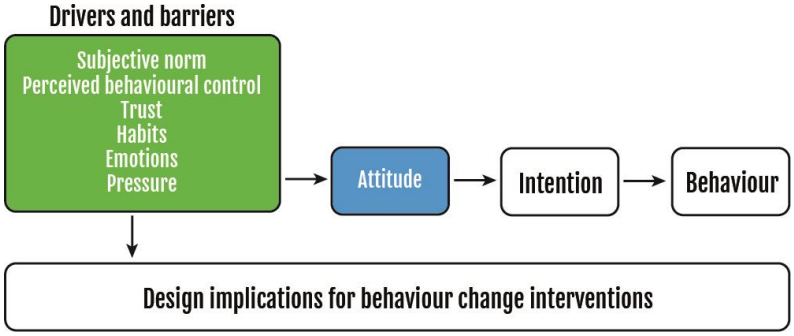

Figure 1. Study design with proposed drivers and barriers influencing HCP's attitudes towards reusables in healthcare and resulting design implications for interventions

Moreover, literature reveals that personal characteristics often influence the link between motivational drivers and sustainable behaviour intentions and attitudes. Consequently, we examine differences in attitude formation among user groups with differentiating characteristics. Brasch et al. (2013) report on differences in adoption intention according to the position one takes in the hospital. Variations in **professional occupation** offer valuable perspectives for understanding product preferences, as they engage with the products in different ways. Physicians, for instance, tend to have a lesser degree of involvement in room preparation and post-procedure cleaning, potentially resulting in reduced awareness and interactions with the products in question. Additionally, a considerable amount of research on sustainable behaviour (Klöckner, 2013; Ntanos *et al.*, 2019) reports on differences between people with higher or lower **ecological concerns** which is often captured by people's NEP (New Environmental Paradigm) score developed by Dunlap and Van Liere (2008) or with a different **value orientation** based on the Schwartz framework (Moyo *et al.*, 2016; Schwartz, 1992). The research question in this study can be articulated as follows: Which variables influence HCP's attitude regarding reusable textiles in healthcare? Are certain user groups more influenced by specific variables compared to others? The findings of the study inform design implications for interventions for promoting the adoption of reusables as a sustainable alternative in healthcare settings.

2. Materials and methods

By using Qualtrics software, an online survey was designed to measure the influence of the proposed variables on attitude formation. Online surveying allows the researchers to contact a large and varied **target group** in a relatively short time frame. For this theory-testing study, the target group is reached using purposive sampling; both a selection based on predefined criteria and sequential snowball sampling is employed. To be eligible for participation in the survey, it was required to be affiliated with an OR setting. Researchers anticipated potential respondents from Dutch-speaking regions in Belgium. The first cohort of respondents were contacted by the researchers personally and they were encouraged to purposefully propagate the survey link throughout their respective professional networks. Direct outreach was made through OR administrators and nurses. The survey had an online presence of two weeks in the month of May 2020. The respondents of the survey were questioned about their perceptions towards wearing reusable surgical gowns. It was assumed that the targeted hospitals currently use disposable gowns. Therefore, there is a risk that respondents will associate a reusable gown with the former cotton reusable gowns. To avoid this misconception for those respondents that are not familiar with the new concept, a video was provided in the survey to clearly illustrate the type of reusable gowns considered in this study. Video analytics were used to track the view count. A link to the video is provided in Appendix A. The survey has been composed in accordance with the Ethics Committee for the Social Sciences and Humanities from the University of Antwerp. Respondents gave their informed consent and were explicitly notified that their data would be processed anonymously.

2.1. Measures

2.1.1. Categorising variables for user groups

For the researchers to be able to distinct respondents, demographic details of the respondents were collected. Firstly, respondents were asked to indicate their **gender** (male, female or other). Secondly, the most recent **professional occupation** of the respondents was asked. To facilitate statistical analysis, the professional occupations were sorted into three categories: 1) Nurse, including assistant nurse, OR nurse, anaesthetic nurse, nursing intern, head nurse, and perfusionist. As opposed to many other countries, in Belgian hospitals, there is no distinction between assisting, OR and anaesthetic nurses. It is common for nurses to alternate these different roles in an OR setting. 2) Physician, including (assistant) anaesthesiologist, (assistant) surgeon, and medical intern, and 3) Other, including occupations such as head of OR, deputy, training coordinator, OR coordinator, and materials manager. **Ecological concern** was measured by using the 15 item, 5-point NEP scale (Dunlap *et al.*, 2000) which reached a Cronbach's Alpha of 0.823. Respondents (n = 179) were median split divided into two groups (high and low ecological concern). Furthermore, **personal value orientation** was captured by using the Short Schwartz value scale (Lindeman and Verkasalo, 2010; Schwartz, 1992) with 10 items and a 9-point scale from -1 to 7. The result of the Principal Component factor analysis indicated three components with eigenvalue > 1, explaining 67.53% of the variance in the Varimax rotated solution. The respondents are assigned a score to each of the components, creating three new variables which were used in a K-means cluster analysis, resulting in the following value clusters:

- The innovator (C1, n = 41): scores high on innovativeness, control on developments, achievements and low on conservatism and tradition.
- The helper (C2, n = 101): scores high on security, benevolence, and responsibility. They are helpful and prioritise the needs of others over their own interests. The majority of respondents fall into the cluster of helpful profiles, this is a characteristic we can expect from HCP.
- The compliant (C3, n = 32) values social approval and finds joy in simple pleasures. They tend to be less conservative. Social order, tradition, and conformity hold less significance for them.

2.1.2. Persuasive elements

Three possible persuasive elements were investigated. For **comfort**, two questions were asked: "How comfortable would you score the current surgical gowns?" and "How comfortable would you score the current OR scrub clothing?". Respondents answered on a 7-point Likert scale (1 = not comfortable to 7 = very comfortable). Furthermore, they were asked to indicate which **functionalities**, according to them, the sterile surgical gown serves. They could select multiple options for a given list: protection of the patient, protection of medical personnel, barrier against moisture, prevention of dust particles in the OR, barrier against microorganisms, temperature regulation for the wearer, comfort and lastly, under the option "other' they could provide their own additions. Lastly, they were asked to what extent a list of proposed elements influences their willingness to **persuade the hospital** to use reusable gowns. Respondents rated the influence per element on a 7-point Likert scale, where 1 = no influence to 7 = strong influence. Elements given were: fear of medical supply depletion, confidence in the hygienic treatment of reusable materials, resource conservation, local employment in laundry facilities, lower price, personalisation of the gowns, increased comfort and the hospital's image.

2.1.3. Attitude and its predicting variables

The proposed variables are measured by formulating three statements about each variable, resulting in a total of 21 statements that can be consulted in Appendix B. Respondents indicated their level of agreement for each statement on a 7-point Likert scale, where 1 = strongly disagree to 7 = strongly agree. Some statements are reverse-phrased to mitigate response bias, their scales have been recoded to ensure a high score indicates a positive perception of reusable surgical gowns. (Gliem and Gliem, 2003). SPSS software (version 28) was used to analyse the data. As intention is closely linked to attitude, in this model attitude is the **dependent variable**. To verify whether the statement scales for attitude and its predicting variables can be combined and used as (in)dependent variables, two Principal Component

factor analyses were carried out with the aim of finding unidimensionality within the statements (Field, 2013). The KMO value and Bartlett's test of significancy indicated that the statements were suitable for factor analysis. The rotated Varimax component matrix suggests, for the **independent variables**, five components with eigen values > 1, explaining 61.57% of the variance. A reliability analysis for the statements in each component resulted in Cronbach's Alpha values between 0.810 to 0.624 for components 1 to 4, having an acceptable internal consistency considering the small sample size of the survey (George and Mallery, 2016; Taber, 2018). Component 5 will not be included in further analyses due to a too low internal consistency. Table 1 shows the statistics of the factor and reliability analysis of the (in)dependent variables in the survey and the items loading on the factors. New interpretative names were given to describe the components based on the items they represent.

Table 1. Factor analysis and reliability analysis of (in)dependent survey variables

	Principal Component Analysis with Varimax rotation				Reliability analysis	New variable scale (min 1, max 7)	
	Eigen value	% of the variance	Cumulative %	Statements included (factor loading)	Cronbach's alpha	Mean	SD
Dependent variable							
Component "Attitude"	2.014	67.15	67.15	AT1 (0.862), AT2 (0.816), AT3 (0.778)	0.738	5.21	1.142
Independent variables							
Component 1 "Trust and emotion"	2.673	14.85	14.85	TSP1 (0.746), TSP3 (0.750), E2 (0.826), E3 (0.641)	0.810	4.27	1.253
Component 2 'External motivators'	2.347	13.04	27.89	SN1 (0.608), SN2 (0.700), SN3 (0.533), WP1 (0.796)	0.660	4.98	0.950
Component 3 "Workload"	2.224	12.35	40.25	PBC1 (0.530), PBC3 (0.641), WP2 (0.637), WP3 (0.727)	0.624	4.39	1.054
Component 4 "Habits"	2.037	11.32	51.56	H1 (0.585), H2 (0.842), H3 (0.859)	0.688	5.32	1.064
Component 5	1.801	10.00	61.57	PBC2 (0.617), TSP2 (0.754), E3 (0.467)	0.455	4.28	1.012

AT = attitude, SN = subjective norms, PBC = perceived behavioural control, TSP = trust and safety perception, H = habits, E = emotion, WP = work pressure

3. Findings

3.1. Sample

Nicely spread over three age categories, the sample consists of 190 valid responses (female: n = 121; male: n = 69) of which 181 respondents are currently employed in the OR, mainly as a nurse (n = 118) or physician (n = 64). The description of the sample (see Appendix C) already reveals that 27% of OR personnel never wears a surgical gown. When working in the OR, others who do wear a sterile attire (n = 132), wear this on average 4.91 hours a day (SD: 2.23 hours). Surgical gown wearers in this survey

wear 3.79 new gowns each day (SD: 2.163). This means that, on average, each gown is worn for 1 hour and 18 minutes.

3.2. Persuasive elements

Comfort of the current gowns scored μ = 5.32 (SD: 1.194) on a 7-point Likert scale. As comparison, the scrubs worn underneath the gowns scored μ = 5.27 (SD: 1.332). Gown **functionalities** are ranked based on the frequency that they were selected: 1) protection of medical personnel (87%), 2) barrier against moisture (86%), 3) protection of the patient (84%), 4) barrier against microorganisms (70%), 5) prevention of dust particles in the OR (31%), 6) comfort (12%), and 7) temperature regulation for the wearer (10%). Notably, the five respondents that provided their own response for the option "Other:" described "sterility" as an additional gown functionality. As to the elements that influence HCP to **persuade hospital management** to start using reusables, we deem those with an average value higher than 4 on the 7-point Likert scale to be influential. Elements are ranked from most to least influential as follows: 1) lower price μ = 4.99 (SD:1.834), 2) increased comfort μ = 4.87 (SD: 1.673), 3) confidence in the hygienic treatment of reusable materials μ = 4.60 (SD: 1.688), 4) hospital's image μ = 4.26 (SD: 1.835) and 5) resource conservation μ = 4.12 (SD: 1.600). The remaining elements have an average value just below 4, indicating they are not particularly influential: 6) local employment in laundry facilities μ = 3.87 (SD: 1.735), 7) fear of medical supply depletion μ = 3.74 (SD: 1.716) and lastly, 8) personalisation of gowns μ = 3.04 (SD: 1.828).

3.3. Predicting attitude

With a view to investigate whether the independent variables (the new components) influence HCP's attitudes toward reusable surgical gowns, regression analyses were carried out. First, a linear regression with the four components was calculated for the total sample, afterwards a regression for each user group, based on gender, professional occupation, ecological concerns and personal value orientation was done. A t-test is used to verify which independent variables are significant within the regression analyses. Table 5 shows the results of the regression analyses and comparison between user groups.

Table 2. Regression analyses with components (dependent variable: attitude)

	Component	Total sample n=190	Gender		Occupation		Ecological concern		Personal value orientation		
			Male n=69	Female n=121	Nurse n=118	Physician n=64	Low n=86	High n=93	C1 n=41	C2 n=101	C3 n=32
Standardised Coefficients Beta	Trust and emotion	.121	.119	.136	.232*	-.111	.136	.131	.350*	.093	-.106
	External motivators	.540**	.538**	.544**	.531**	.531**	.524**	.546**	.424*	.538**	.747**
	Workload	.152*	.189	.124	.131	.141	.067	.167	.073	.182*	.062
	Habits	.020	.080	-.014	-.004	.211	.140	-.077	-.117	.025	.254
R^2		.479	.492	.479	.544	.419	.411	.475	.459	.473	.637

*significance <0.05, ** significance <0.001

HCP are most influenced by external motivators. There are notable differences in significant variables amongst user groups. Other influencing variables include trust and emotion, and workload. Nurses and people with the value orientation innovative (C1) are influenced by their feelings and trust. Workload has an influence on HCP in general and individuals with value orientation helpful (C2). Habits do not seem to affect HCP at all.

4. Discussion

By investigating HCP's attitudes towards reusable surgical gowns, the findings of this research outline design implications for promoting the adoption of reusables as a sustainable alternative in healthcare. Utilising methods outlined by Hardeman et al. (2002) (information, persuasion, increasing skills and social encouragement) interventions influence both HCP's motivation and control (Ajzen and Schmidt,

2020). To ensure the appeal of reusable surgical gowns among HCP, these gowns should either outperform or demonstrate comparable performance to the present-day disposable gowns. Based on the current research, we propose the following **design implications**:

1. DESIGN FOR COMFORT & USABILITY: **Comfort** of the gowns generally scored well as a persuasive element. Although it is generally not considered a core functionality, increasing comfort and usability will facilitate the actual control over the behaviour of wearing surgical gowns. Furthermore, no extra **workload** is expected as a simple implementation process is anticipated by HCP with positive attitudes towards reusable gowns. Workload influences attitude formation, specifically for individuals with value orientation helpful (C2). Reusable gowns also do not require inclusion into custom packs, which facilitate efficiency in the OR.
2. DESIGN FOR MULTIPLE FUNCTIONS: Interestingly, 87% of HCP in this study indicated "**Protection of medical personnel**" to be a functionality of the surgical gowns. Nevertheless, according to, for example, the European Medical Device legislation and the harmonised standard EN13795 for surgical clothing and drapes (NBN, 2019), sterile surgical gowns are Medical Devices (ISO, 2016) and therefore serve primarily to protect the patient. Sterile clothing needs an extra certification before it can be marketed as personal protective equipment (PPE). This certification is not mandatory; therefore, it is not common. Offering certified protection of HCP will increase HCP's motivation for wearing reusable gowns. A reusable gown can be distinguished from disposables by additionally **certifying as PPE**, because the effort and cost of certification might be rewarded over the gown's multiple uses.
3. DESIGN FOR COMMUNICATION: **External motivators** have the biggest influence on HCP's attitude formation. HCP like to identify with a sustainable work environment, consequently the hospital's image is a persuasive element. Family, friends, but more importantly colleagues and hospital management play a role in supporting an environment where sustainability actions such as implementing the use of reusable textiles are successful. Reuse of medical devices should be destigmatised. This can be achieved by opening up the discussion of reusables within the healthcare sector. Examples of hospitals that already have adopted reusable products could serve as inspiring cases for debate. This third design implication can be classified with "social encouragement" as a behaviour change method in line with Hardeman et al. (2002).
4. DESIGN FOR TRUST: Insight into functionalities of surgical gowns, indicated by HCP, provides useful information on criticalities that are more prominent for HCP. Accurately informing HCP could possibly eliminate doubts or uncertainties revolving around 'reusability in healthcare' and ensure HCP's confidence in the hygienic handling of reusable material. Notably, individuals with the value orientation innovative (C1), will have more positive attitudes towards reuse as their **emotions and trust perception** increases. Moreover, **confidence in the hygienic handling of reusables** was also considered as a persuasive element. In accordance with Brasch et al. (2013), this implies that confidence in reprocessing is insufficient, and that there are concerns about the proper handling of reusable sterile textiles.

Using online surveying in this study allows the researchers to objectively measure respondents' attitude and its predicting variables. Some drawbacks of this approach are: a lack of context for the respondents, self-reported behaviour that might deviate from the real context and, selection bias as the survey may not reach certain demographics. As this study is part of a broader research, different methods will be taken into account to assess different aspects of the research context. To understand the "respondents why's", further qualitative research will be used in order to gain a comprehensive understanding. Each possible pathway towards design interventions could be elaborated along the five phases proposed by Cash et al. (2023) and may require specific research efforts. For example, additional research such as testing and interviewing may offer deeper insights and continuation of the behavioural design process.
The survey used a video explainer mainly for respondents not yet familiar with new reusable gowns. Due to the inability to guarantee that respondents viewed this video, video analytics were used to monitor the view count. The analytics revealed that the video received 111 views during the survey's online duration, suggesting that a substantial portion of the sample may still harbour misconceptions regarding the reusable gowns and the research context.

The COVID-19 pandemic might have influenced the respondents' answers by, for example, a pressing demand for PPE, and worldwide shortages (Zhu *et al.*, 2020). Surprisingly, respondents indicated that the influence was negligible and only a little concern about depletion of medical supplies and hygiene practices in the work environment remained. It should be noted that the distribution of demographics and categorising variables may be different in other countries and hospitals, therefore, it is important to consider that the conclusions drawn from this survey may deviate in other contexts.
In addition to its implications for design, the study also intersects with other research domains, such as the co-evolution of sense-making in organisational contexts. This broader perspective may unveil deeper insights into how cultural change, e.g. based on value adherence, shapes individual and organisational behavioural shifts (Cristofaro, 2022), potentially offering inspiration for further exploration in the realm of sense-making design. Furthermore, results could be examined through the lens of Hofstede's cultural dimensions (Hofstede, 2011) and the impact of work pressure on power dynamics and decision-making. However, such analyses extend beyond the scope of the current research.

5. Conclusion

This study addresses the prevailing reliance on disposable consumables and proposes reusable alternatives as means to achieve more sustainability in healthcare. Preferences of HCP are essential factors that affect the hospital's decision to revise (new) medical products. Examination of surgical sterile gowns, revealed compelling elements for the transition to reusables. First, HCP exhibit a preference for a gown due to enhanced comfort. Additionally, external influences, including opinions from hospital colleagues, supervisors, as well as family and friends, impact their decision-making concerning the work environment. Moreover, trust and safety perceptions play a crucial role, given the gown's primary function of patient protection. Despite this, HCP also perceive surgical gowns as PPE, even though certifications in this regard are infrequent. Design implications fostering the implementation of reusable gowns were concluded to enhance a successful transition to reusables. Further research is needed to test reusable gowns in ORs to understand the real drivers and barriers.

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Appendix A

Hyperlink to the video explanation of the reusable gowns used in the survey (YouTube): https://youtu.be/wIqRuNAybk0?feature=shared

Appendix B

Hyperlink to Table. Statements used to measure the proposed variables: https://drive.google.com/drive/folders/1gV2nRNQwwuqaiNiK6_YE2cANaow0wGNP?usp=sharing

Appendix C

Hyperlink to Table. Sample description of the survey (n = 190): https://drive.google.com/drive/folders/1gV2nRNQwwuqaiNiK6_YE2cANaow0wGNP?usp=sharing