



UNIVERSITI
TEKNOLOGI MARA
MALAYSIA

LATEST
NPD

51694



conceptcrew

INTELLIGENCE TOWEL DRYER & DISINFECTANT "SUPERCLEAN"

Faculty : Faculty of Health Sciences
Program : Bachelor of Optometry
Program Code : HS246
Course : Technology Entrepreneurship
Course Code : ENT600
Semester : 7
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1.0 EXECUTIVE SUMMARY

Germ or bacteria are more likely to grow on a wet surface and we will be at a risk of getting a disease if we are exposed to bacteria. Without our concern, we use a thing that brings a lot of germs every day which towel is. So, how long does it take for the towel to completely dry and how confident we are that our towel brings least of germs?

So here is the Intelligence Towel Dryer & Disinfectant with UV light technology will help to dry the towel much sooner and disinfecting the towel. So, their towel cannot be dried as fast as those who opt for outdoor drying. Besides, most students who stay in hostel also have a problem with wet and smelly towel due to no space to hang their towel. Most of them just hang their towel in a bathroom and let it dry on their own.

The most effective way to dry and disinfect the wet towel naturally is by hanging the towel under the sun light as it will emits an ultraviolet that can help in kill the germs. This theory will be implemented into this new technology to dry and disinfect the towel even in a closed and dark room.

2.0 INTRODUCTION

Problem Statement/Issues

Based on the consumer insight, the problem statement classified into 2 category which are;

1. Fast life

According to Star Online News, Malaysian work an average of 15 hours more than their contracted hours each week, surpassing Singapore, Hong Kong and Australia, but has one of the highest percentages of productivity loss. The survey also found that Malaysia has the highest percentage of employees who slept less than seven hours a night at 56%. Therefore, the society living in Malaysia do not have enough of time to take care of other things such as house chores including laundry, etc.

2. Health and hygiene.

Wet and smelly towel not only become a problem to anyone who using it but also, allowing bacteria to grow. This will increase the incidence of skin disease such as rashes, ringworm, etc. Therefore, wet towel affecting one's health. According to Times.com, dirty towels can carry a huge variety of microbes, and they have even been linked to spreading infectious disease. Ones cannot keep the towels 100% germ-free, experts say, but ones can limit the grossest ones by washing the towels.

Also, hygiene become a basic need of the human's life as it required to keep and maintaining healthy lifestyle. Thus, a clean towel affects the human life by providing cleanliness and hygiene.

Methodology: Data Collections (Who, Where, When, How)

Furthermore, this study had done by face to face interviewed with a few structured questioned about how people put their towel after getting bath and what happened after they back from work. This face to face interviewed had done among 100 persons with 23 aged and above that including educational and worker people who had not being at home more than 6 hours a day. The interviewed had done for 2 months that including students and lecturers in UiTM Puncak Alam Campus. The data collection had done by approaching people who were included criteria and asking them a few simple questions and take about 5 minutes for each person. The results showed many of them keep her towel in bath room especially students leaving college which them put the towel under room temperature without exposure sunlight. Person who had small kids also had limitation in keep their home clean from any bacteria especially for their kids.

Limitations

The identified limitation of this products;

1. The time of device to dry towel is varied as different towels have different thickness.
2. The power of the UV light to penetrate fabrics is varied due to thickness of different fabrics.
3. The availability of components is limited. Hence, if the UV light broke, the product will not function anymore.
4. Energy consuming due to different of fabrics. The thicker the fabrics, more time will be ne

3.0 TECHNOLOGY DESCRIPTION

The Intelligence Towel Dryer & Disinfectant is a smart appliance for the consumer who has problem with wet towel after used and in bathroom; it instantly disinfects and dries the wet towel, using ultra violet rays and a high-speed dryer fan. Using this appliance kills almost 90% of the bacteria in a towel, making it safe for use without additional washing. The idea behind the concept is to improve our daily routine and not really change it.