

Multi-Activities Jacket

Shahrizad Fitri Mustapha

Faculty of Art & Design, Universiti Teknologi MARA Cawangan Perak, Kampus Seri Iskandar, Perak

Email: shahrizad.mustapha@gmail.com

Abstract

The good travelling attire will make people who love to do outdoor activities, feel comfortable when travelling, working or playing with flexible silhouette. The multifunctional elements include waterproof, flexibility, hi-tech, high performance, adjustable, which are suitable for multi activities. More efforts are needed to develop an outdoor jacket that can be used by everyone specially Muslim, so they can perform their solat everywhere and anytime with functional elements. The purposed designs will reduce the physical challenge of donning the jacket, the restrictions on movement while offering safe ambulation likelihood of injury from a fall. The design will be appropriate to overcome weather condition in Southeast Asia with waterproof high-tech fabric and comfortable for user.

Keywords: jacket, multifunctional, multi activities

Introduction

Islam spread through the adventure. The Prophet himself asked us to travel to seek knowledge. The further we travelled adventure the more knowledge and experience to be collected. There is nothing more satisfying than trying something that you have never done before. Once you shoot down the rapids, climb the highest peak, or go zip lining through the rainforest you will begin to realize just how important traveling is. For many people, the idea of travelling to exotic locales and exploring the world's most famous destinations is strictly relegated to the brief interludes provided by vacations and holidays (Smartertravel, 2012). The demands of full time jobs, school responsibilities and family obligations prevent most of us from travelling as often as we would like. There are some, however, who consider travel to be a hobby and these fortunate individuals spend their time, money and resources visiting and touring the planet's premiere vacation spots. To travel as a hobby, a person must possess an adventurous spirit and a willingness to let themselves adapt to whichever locale they find themselves in next. Travel hobbyists take their passion very seriously and make sure to fully acquaint themselves with the underlying culture, customs and civilization which define each of the places they visit.

More efforts are needed to develop outdoor jacket that can be used by everyone including older adults with functional limitations (Scootest, 2001). The designs

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will reduce the physical challenge of donning the jacket, reduce the restrictions on movement and safe ambulation, and reduce the likelihood of injury from a fall. The design will appropriate with weather condition in Southeast Asia with waterproof high-tech fabric and comfortable for user. Outdoor jacket helps user to keep warm when walking, cycling, mountaineering etc. Similarly, waterproof boots make user able to walk comfortably on the rough ground. These types of outfits are flexible and can be worn in any type of weather. The main purpose of outdoor and travel clothing is to protect from all types of weather and make traveler more comfortable. Such clothing is manufactured to provide added protection and insulation. They look stylish but protect user from rain, wind and also offer warmth. To make your outdoor activities and travel more enjoyable, they are also able to absorb moisture (Coolist, 2000).

Problem Statement

Outdoor hobbies provide a great opportunity to get some fresh air, exercise and to connect with the world around you. These hobbies are great for adults and for children, all of whom need to gain an understanding of nature and a respect for the natural world (Motes, 2009). Most people in Malaysia make outdoor activities as their hobbies such as fishing, hiking, cycling, riding and travel and they often choose more than one activities. As we know jacket is one of the important material to protect ourselves from the possibility of injuries, weather conditions especially when

doing the activities such as hiking, biking, fishing, and riding. Therefore, wearing appropriate clothing is essential when doing such activities that can cause injury to ourselves. Wearers need a suitable outdoor jacket that can give comfort to them and satisfaction while performing activities (Scootevest, 2011). From an observation, most of the existing outdoor jackets are only suitable for a specific activity. Therefore, most people do not wear appropriate clothing when doing an outdoor activity. For people who like to do outdoor activities they wear other types of jacket that can be worn for different activities and in accordance with the weather in Malaysia.

For many people, the internet, mobiles, social networking and other new technologies are shaping their daily lives. The youth today are becoming more and more attached to their technology (Teachtoday, 2012).

Technology like iPods and cell phones make a personal bubble and make it portable. Cell phones create a distraction from real life experiences and because of their ability to be taken anywhere, teens can be seen texting anywhere they can (Amie, 2012).

Most people agreed that technology is getting smarter. Now, even the clothes have a technological component of application. For example, the product called “The Helmet Hero.” With it, you can take a helmet, such as a bicycle, ski, or motorcycle helmet, and mount a small high-definition camera on it that can record as HD video or capture still photography (Burrus, 2013).

The existing design of an outdoor jacket does not meet current trends and technology (Scottevest, 2000). The outdoor jacket needs to follow the trends and cater to the current technology uses such as the use of iPad, iPod, cell phone, android, earphone, GPS and so on. This is important because each of the resulting design of the jacket should follow the size and shape of the popular gadgets these days. Safety feature must also be considered when designing an outdoor jacket as wearers involve with activities that are prone to accidents.

Research questions

Is the existing design of an outdoor jacket follows the current trend which is suitable for Muslim and suitable to wear in Southeast Asia?

To what extent an outdoor jacket can be innovated into a high-tech fashion design?

What are the characteristics that need to be applied on a jacket that will fulfill the multi-functions and multi-activities purposes?

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The objectives of the research

To identify the new potential design range for an outdoor jacket that is suitable to wear by Muslim in Southeast Asia.

To examine the design styles of an outdoor jacket that portray the high-tech fashion features.

To identify the design elements that needs to be considered in an outdoor jacket for the multi-activities purposes especially for Muslim to perform their Solat.

The Significance of Study

The important of the research is that it can open the author’s mind and also the community about the world of fashion, especially in the innovation of hi-tech fashion on design. Ariyatun and Holland (2005) propose a “new product design” model emphasizing the full integration of electronics and fashion, described as “the ultimate goal of smart technology”. Both cases highlighted the role of technology in fashion and it is crucial to adapt technology in fashion as today’s lifestyle is highly influenced by the fast technology (Bougourd, McCann & Stevens, 2010).

This research gives a new knowledge to the current development of outdoor jacket. It is a cycle process which involved execution or a new research on the old material and technique. In fact, findings from this research would help to identify the element and design approaches in more depth. This research can serve as the future reference to all types of people, especially to both fashion students and fashion industries.

However, what we can see here is every outdoor jacket has the combination of weather, technology, culture, races, religion and custom through the sharing of individual’s knowledge and experience. Besides that, this research also creates a new idea on the development of outdoor jacket. Whilst the contribution of the research is the solution towards the innovation of outdoor jacket with multi-functional purposes, this research also helps to identify both the simple and accurate techniques involved in outdoor jacket. Besides that, it also aids the readers to get information and to think of the new idea in producing the outdoor jacket. It can open the reader’s mind to apply different kinds of designs.

Finally, this study also highlights the importance of outdoor jacket that will educate the public especially

Muslim to wearing appropriate jacket for outdoor activities as well as for multi-activities purposes.

Limitation

During this study, researcher had a problem to choose types of jackets. This is because most existing jacket is focusing on particular activities and the jacket must be appropriate with the activities. Furthermore, this study is only focusing on Men jackets.

It is difficult to find local brands selling outdoor jacket, and hard to collect the information because of the co-operation from stores.

Delimitation

This research is not only focusing on outdoor jacket but also all types of jackets in the market.

This study also explores the particular electrical part to produce a high-tech look on an outdoor jacket.

Multi-function and multi-activities

Multi-function mean something that serves more than one purpose. (Row, Paul & Fernie, 2004). “More efforts are needed to develop outdoor jacket that can be used by everyone including older adults with functional limitations. The designs will reduce the physical challenge of donning the jacket, reduce the restrictions on movement and safe ambulation, and reduce the likelihood of injury from a fall. the design will appropriate with weather condition in Southeast Asia with waterproof high-tech fabric and comfortable for user.” (Row, Paul, McKeever and Fernie, 2005)

If the jacket is functional its mean it can be worn in many purpose of activities. Multi-activities meant to do more than one activity such as photography, hiking, cycling, riding, fishing, and travelling. People nowadays make outdoor activities as their hobby and they like to do more than one of the activities such as cycling and fishing, hiking with cycling, photography and hiking and many more. So these types of people need a multi-function jacket (Wikitravel, 2007). The jacket will be multifunction mean it will be waterproof, detachable, flexible, adjustable and follow the fashions trend. It will create sense of protective and comfort which will enable the user to enjoy their activity and adventure. The jacket will protect the user itself and their item, tools or gadget with safety pocket and waterproof fabric.

For photography activity, when shooting outdoors, especially on long photo shoots, photographer often need comfortable clothes that protect them and their camera from temperature changes and bad weather. Equally as important, they need to feature plenty of pockets in order for you to be able to store essential accessories. That’s why a photographer-friendly vest or jacket is useful. The exact features you need will largely depend upon your individual style of shooting and photographic genre. Nevertheless, here are the key features to look out for when choosing a photography jacket or vest. Weatherproof features by using windproof fabric, taped seams, waterproofing treatments such as nikwax and teflon coatings, generous flaps to protect pockets and well-proportioned hoods with visors are all desirable when it comes to keeping yourself protected from the elements. Breathable fabrics and built-in vents around the back and under the arms will enable moisture to escape, helping you to stay dry and comfortable. For the storage, the jacket need offers enough pockets for photographer needs, and that the method of fastening them suits your photographic genre (Josie Reavely, 2012). People who love hiking, fishing and travelling, they need the jacket can give the comfortable in nature besides protected such as safety pocket, waterproof fabric, hooded and plenty of storage and easy access pocket. There is no specific jacket for cyclist but to improve cyclist safety many of them wearing of personal protective equipment such as protective clothing and helmets. Protective clothing may include certain types of jackets, gloves, boots, and pants. Same with motorcyclists, jackets meant for motorcyclists are typically made of nylon, leather, or Kevlar. These jackets typically include heavy padding on the elbow, spine, and shoulder regions. Gloves are generally made of leather or Kevlar and some include carbon fiber knuckle protection (Aether, 2002).



Figure 1: Multi-function elements that will develop the outdoor jacket.



Figure 2: Multi-activities person with different types of jackets.

Research methodology

This study used both qualitative and quantitative methods because it deals more on subjective material and design that need to fulfill the dweller needs. For the primary research, observation and surveys were used to obtain data from individuals and target group. There are six target groups such as photographer, fishing group, hiking group, cycling group, rider group, and traveler. The observation is important to collect data and the best way to study the design preference and problem. Observations on target group have been done in local and other country such as Beijing but the target group are still the local

dweller. From the observation, researcher finds out about the problem and issues that their faced from the existing outdoor jacket before they will be asked to fill in a questionnaire. Evaluation chart is one of the methods that can be justify which types of design that appropriate to make as an outdoor jacket.

The researcher used the experimental method because it could help to achieve several objectives. The experiment is to explore on types of design line, silhouette, material, colour, detailing and the technology which is appropriate to be applied in outdoor jacket.

The result and analysis is not only based on the experiment but the observation as well. Whatever is discovered from the experiment and testing process, it will be recorded and become the finding of this research.

Research Methodology Overview

Below is the overview of the method that used to fulfil the objectives of this study.

Objectives 1: To identify the new design and materials for outdoor jacket.

Table 1: Objective 1

NO	Purpose	Methods	Justification
1.	Understanding of the outdoor jacket	Contextual review	Secondary data through readings to understand the shape form detailing and state of art of the outdoor jacket local and globally.
2.	Define the new designs and new materials in outdoor jacket.	Observation/ Questionnaire and Justification	Visual experience is important to observe the type of outdoor jacket. Interview with the experts can gained information of outdoor jacket.

Objectives 2: To examine the design elements that needed to be considered on outdoor jacket design for the multi-activities purpose.

Table 2: Objective 2

NO	Purpose	Methods	Justification
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1.	Understand and identify the activities of target group when they wear outdoor jacket	Observation	Observation on target group such as traveller, bikers, and related groups activities and see what type of activities and how they solve their problem on comfortable and functionality of the jacket. Talk to them and try to understand what they need for improved the outdoor jacket.
2.	Define and categorized what is the design element that needs to be considered in outdoor jacket for the multi-activities?	Interview and contextual review (case study and cluster table)	Questionnaire will help to understand the purpose of the designing outdoor jacket and how the jacket can reflect the activities.

Based on primary and secondary data. The analysis result suggests the gap in the outdoor jacket and potential to innovate and improve the outdoor jacket based on activities and environments in Southeast Asia. The design statement has been identified based on data collection which is:

To design the innovation multi-function and multi-activities outdoor jacket.

Analysis and findings

The Observations

The researcher has conducted the observation approach to collect qualitative data. The target groups were selected at random and they were asked about their current jacket before they fill in the questionnaire. The observation session was held at various places with selected target group. There were six target groups chosen such as traveler, cycling group, fishing group, hiking group, photographer and hiking group. The data gathered were very important for the researcher to get an accurate result in the examining the respondent preference on the design criteria needed for outdoor jackets.

Design process

i. Objectives 3: To investigate the advantages of designing an outdoor jacket by focusing on high-tech fashion.

Table 3: Objective 3

NO	Purpose	Methods	Justification
1.	Identify the new high-tech fashion and explore the appropriate high-tech for outdoor jacket	Contextual review and observation	Secondary data through readings and internet to understand the high-tech fashion. Talk to them and try to understand what they need for improved the adventure jacket.
2.	Define what type of high-tech is suitable and can full fill the needs of target groups.	Interview and contextual review	Questionnaire will define how the high-tech on jacket can reflect the activities.

This chapter explains in detail about the design process in this study. There are a few steps to follow to get the better result and good design criteria. The flow start with the problem which is all the data and problem findings from the observation and evaluation besides the literature review in chapter 2. The entire problem has been stated in Chapter 3. The material and user needs also have been stated in Chapter 2 and 3. For this chapter researcher needs to study on design research which is about the market trend, aesthetic, fashion forecast. All the data about design research are gathered with the data that have been collected in chapter 2 and 3.



Figure 3: This process shows the flow to make design criteria.

Design Consideration

Based on finding and design recommendation from the analysis in previous chapter, there are three main factors that important to make good design criteria. Aesthetic - Aesthetic appearance (shape, colour, texture), the jacket will be design with futuristic look. The shapes and silhouette will be more fit to the body but not too tight, it easy for user to move and do their activities but still follow the fashion trend. The colour will be dark follow the 2013/2014 colour forecast.

Usability- Function

The jacket will be multifunction, waterproof, flexibility, adjustable and follow the fashions trend. It will create sense of protective and comfort which will enable the user to enjoy their activity and adventure. The jacket will protect the user and their item, tools or gadget with safety pocket and waterproof fabric.

Technical - Material: The jacket will use the hi-tech waterproof fabric which can protect the user and their item. The fiberglass also will be used as the padding to protect particular part of user. Reflection fabric and LED light will help user for night activities.

Design Statement

High performance multi-activities outdoor jacket that's perfect for various activities such travelling, hiking, running, cycling, riding, fishing and photographer. Lightweight and breathable high-tech fabric features advanced moisture wicking and odour resistant

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properties to keep you fresh and dry when you're working hard, and offers a comfy stretch fit for great mobility. The jacket with adjustable and detachable, ventilation zips and water repellent zip pockets are just some of the features to look out for in this range. Water resistant and breathable fabric allows the wearer to stay comfortable and dry. The high-tech of fashion also been applied on the jacket such as lighting, rechargeable phone with solar, mini speaker hidden earphone.



Figure 4: Design Characteristic

Conclusion & recommendations

After describing the design process, the outcome can be produced based on the result of the observation and design process carried out. In this final stage, the concept of multi-activities outdoor jacket is the answer to the research question.

Finally, the design of multi-activities jacket is produced to meet the requirements of the study and fulfil the needs of target groups. Below are the examples of the outcomes and after made some changed and developed, the final design will be the real prototype and there are 4 prototypes for this research.

Conclusion

In conclusion, developments on outdoor activities jacket have matched and met the user requirements which is researcher believed that innovation of multi activities jacket can give satisfaction for the consumer beside there is also one of designomic idea which is users only need to have this jacket for various activities.

This research also successes to identify the new potential design range for outdoor jacket that is suitable to wear in Southeast Asia. High-tech fashions are appropriate to be use on outdoor jacket. The entire respondent agreed with high-tech fashion on outdoor jacket. Researcher succeeds to find the design elements

that needs to be considered in an outdoor jacket for the multi-activities. It is clear that both case manufacturers and marketers are listening to the needs and wants of customers, and are making new cases to meet these demands. Researcher believes additional innovations will bring even more new features to the outdoor jacket and this industry that will add more convenience and usability. With the high tech of fashion, safety padding, plenty of pocket, detachable particular panel and water resistant feature, this jacket will be would be an interesting jacket and is suitable for all activities than meet the consumer demands.

Recommendations

Regarding the understanding of outdoor activities jacket, users should view the importance of the jacket. Outdoor jacket are the essential things that need to have if users were go outdoor activities like walking, hiking, fishing, cycling and riding. Users have to choose the proper jacket that well-fit and suit users taste that will support for outdoor. Being comfortable when doing outdoors activities will be of the utmost importance to users' outdoor experience. Well-ventilated outdoor jacket, freedom of movement is just as important as durability, protection from sharp stones, combines wind and water in the hood, shoulders, front panel with safety padding and high technology of fashion such as audio and lighting.

Outdoor clothing in the price is higher than the general sportswear, but most of its functionality or durability exceeds people's expectations and most of all value for money and many people do not realize the importance of outdoor clothing.

Outdoor jacket is also known as a full-function jacket and it is the most important outdoor sports clothing. Most outdoor jacket has been developed, make it easier for people to enjoy nature. The whole idea behind the development is to offer functional jacket for more comfortable and meet the user's requirement for their trips into the outdoors. The existing outdoor jacket does not follow fleeting trends and all of the products stand for functionality and durability for years to come.

The jacket in the existing design has many unique features, such as shoulder or elbow these garments use a high-tech fabric and increase the zipper, the exercise can be opened breathable. All of these designs have brought great convenience for users. Most worth mentioning is that this type of clothing is made with breathable material, breathable word material more or less water resistant.

However, further studies could focus more on the statistical analysis of the issue, perhaps using a combination of quantitative and qualitative research approaches. In addition, further research would need to be conducted with different groups of participants so that generalizations can be made.

Furthermore, since this study was made for the local target users, it is suggested that further study be conducted to investigate how the outdoor jacket approach is being actually applied in other countries. Further study, this research can be continued to find innovative, smart solutions, improve material, decrease weight and increase the freedom of movement in outdoor jacket and equipment to get better result and fulfill the needs of consumers.

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