

**Supplementary Materials: Developing Guidelines for Thermal Comfort and Energy Saving  
During Hot Season of Multipurpose Senior Centers in Thailand.**

Participant No  Data No

**Questionnaire**

**Part 1: Indoor and outdoor environment**

1	Date.....
2	Times.....
3	Season
	Hot season <input type="checkbox"/> Rainy season <input type="checkbox"/> Cold season <input type="checkbox"/>
4	Surveyed room name.....

5	Outdoor environment (using data from the Thai Meteorological Department)
	Outdoor air temperature [°C] .....
	Outdoor Relative humidity [%] .....
	Outdoor Air velocity [ m/s].....
	Others.....

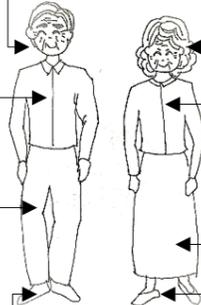
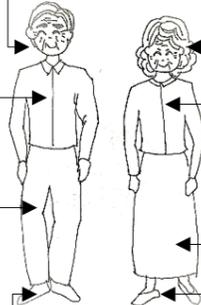
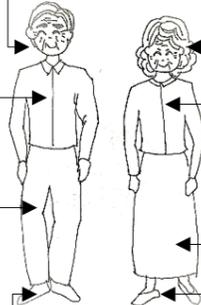
6	Indoor environment (using data from measurement)
	Air temperature [°C] .....
	Mean radiant temperature [°C] .....
	Relative humidity [%] .....
	Air velocity [ m/s].....

7	Surveyed point in the room.....
8	Drawing surveyed point in the room in brief.

## Part 2: Demographic data

1	Age [year].....	
2	Weight [kg].....	
3	Height [cm].....	
4	Gender: Male <input type="checkbox"/>	Female <input type="checkbox"/>
5	Occupant's Activity Level (Tick the one that is most suitable)	
	Seat quiet / writing/ Reading seated 1.0 met <input type="checkbox"/>	Typing 1.1 met <input type="checkbox"/>
	Filling, seated/ Standing, relaxed 1.2 met <input type="checkbox"/>	Filling, standing 1.4 met <input type="checkbox"/>

## Part 3: Clothing insulation of the subjects

1	Total clothing insulation value [clo].....										
<table border="0" style="width: 100%;"> <tr> <td style="width: 33%; vertical-align: top;"> <input type="checkbox"/> Scarf    <input type="checkbox"/> Cap    <input type="checkbox"/> Hat   <input type="checkbox"/> Long-sleeve T-shirt    <input type="checkbox"/> Vest  <input type="checkbox"/> Long-sleeve shirt    <input type="checkbox"/> T-shirt  <input type="checkbox"/> Suit/ jacket    <input type="checkbox"/> Short-sleeve shirt  <input type="checkbox"/> Suit/ jacket             </td> <td style="width: 33%; text-align: center; vertical-align: middle;">  </td> <td style="width: 33%; vertical-align: top;"> <input type="checkbox"/> Hat    <input type="checkbox"/> Cap    <input type="checkbox"/> scarf   <input type="checkbox"/> Bra    <input type="checkbox"/> Vest  <input type="checkbox"/> T-shirt    <input type="checkbox"/> Long-sleeve T-shirt  <input type="checkbox"/> Short-sleeve shirt    <input type="checkbox"/> Long-sleeve shirt  <input type="checkbox"/> Suit/ jacket    <input type="checkbox"/> Cardigan  <input type="checkbox"/> Dress             </td> </tr> <tr> <td style="vertical-align: top;"> <input type="checkbox"/> Sweat pants    <input type="checkbox"/> Underpants  <input type="checkbox"/> Loincloth    <input type="checkbox"/> bathing cloth  <input type="checkbox"/> Trousers    <input type="checkbox"/> Shorts             </td> <td></td> <td style="vertical-align: top;"> <input type="checkbox"/> Underwear    <input type="checkbox"/> Slip skirt  <input type="checkbox"/> Knee-length skirt    <input type="checkbox"/> Angle-length skirt  <input type="checkbox"/> Shorts    <input type="checkbox"/> Trousers  <input type="checkbox"/> Sweat pants    <input type="checkbox"/> Loincloth  <input type="checkbox"/> Sarong             </td> </tr> <tr> <td style="vertical-align: top;"> <input type="checkbox"/> Socks    <input type="checkbox"/> Bare feet  <input type="checkbox"/> Sandals    <input type="checkbox"/> Boots  <input type="checkbox"/> Shoes    <input type="checkbox"/> Casual shoes             </td> <td></td> <td style="vertical-align: top;"> <input type="checkbox"/> Bare feet    <input type="checkbox"/> Socks  <input type="checkbox"/> Boots    <input type="checkbox"/> Sandals  <input type="checkbox"/> Casual shoes    <input type="checkbox"/> Shoes             </td> </tr> </table>			<input type="checkbox"/> Scarf <input type="checkbox"/> Cap <input type="checkbox"/> Hat  <input type="checkbox"/> Long-sleeve T-shirt <input type="checkbox"/> Vest <input type="checkbox"/> Long-sleeve shirt <input type="checkbox"/> T-shirt <input type="checkbox"/> Suit/ jacket <input type="checkbox"/> Short-sleeve shirt <input type="checkbox"/> Suit/ jacket		<input type="checkbox"/> Hat <input type="checkbox"/> Cap <input type="checkbox"/> scarf  <input type="checkbox"/> Bra <input type="checkbox"/> Vest <input type="checkbox"/> T-shirt <input type="checkbox"/> Long-sleeve T-shirt <input type="checkbox"/> Short-sleeve shirt <input type="checkbox"/> Long-sleeve shirt <input type="checkbox"/> Suit/ jacket <input type="checkbox"/> Cardigan <input type="checkbox"/> Dress	<input type="checkbox"/> Sweat pants <input type="checkbox"/> Underpants <input type="checkbox"/> Loincloth <input type="checkbox"/> bathing cloth <input type="checkbox"/> Trousers <input type="checkbox"/> Shorts		<input type="checkbox"/> Underwear <input type="checkbox"/> Slip skirt <input type="checkbox"/> Knee-length skirt <input type="checkbox"/> Angle-length skirt <input type="checkbox"/> Shorts <input type="checkbox"/> Trousers <input type="checkbox"/> Sweat pants <input type="checkbox"/> Loincloth <input type="checkbox"/> Sarong	<input type="checkbox"/> Socks <input type="checkbox"/> Bare feet <input type="checkbox"/> Sandals <input type="checkbox"/> Boots <input type="checkbox"/> Shoes <input type="checkbox"/> Casual shoes		<input type="checkbox"/> Bare feet <input type="checkbox"/> Socks <input type="checkbox"/> Boots <input type="checkbox"/> Sandals <input type="checkbox"/> Casual shoes <input type="checkbox"/> Shoes
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Note.....											

## Part 4: Thermal sensation

### 4.1 feeling to environmental parameters

1	How do you feel about the temperature in the room at this moment ?						
	Cold <input type="checkbox"/>	Cool <input type="checkbox"/>	Slightly cool <input type="checkbox"/>	Neutral <input type="checkbox"/>	Slightly warm <input type="checkbox"/>	warm <input type="checkbox"/>	Hot <input type="checkbox"/>
2	How do you feel about the humidity in the room at this moment ?						
	Very dry <input type="checkbox"/>	Dry <input type="checkbox"/>	Slightly dry <input type="checkbox"/>	Neutral <input type="checkbox"/>	Slightly humid <input type="checkbox"/>	Humid <input type="checkbox"/>	Very humid <input type="checkbox"/>
3	How do you feel about the air velocity in the room at this moment ?						
	Very low <input type="checkbox"/>	Low <input type="checkbox"/>	Slightly low <input type="checkbox"/>	Neutral <input type="checkbox"/>	Slightly high <input type="checkbox"/>	High <input type="checkbox"/>	Very high <input type="checkbox"/>

#### 4.2 Overall feeling

1	Do you comfortable now ?					
	Very Uncomfortable <input type="checkbox"/>	Uncomfortable <input type="checkbox"/>	Just Uncomfortable <input type="checkbox"/>	Just Comfortable <input type="checkbox"/>	Comfortable <input type="checkbox"/>	Very Comfortable <input type="checkbox"/>
2	How do you feel skin moisture at this time ?					
	None <input type="checkbox"/>	Slightly <input type="checkbox"/>	Moderate <input type="checkbox"/>	Profuse <input type="checkbox"/>		
3	How do you rate the overall acceptability of the feelings at this moment ?					
	Acceptable <input type="checkbox"/>			Not acceptable <input type="checkbox"/>		

#### 4.3 Thermal preference

1	What do you like to be about the temperature?				
	Much warmer <input type="checkbox"/>	Slightly warmer <input type="checkbox"/>	No change <input type="checkbox"/>	Slightly cooler <input type="checkbox"/>	Much cooler <input type="checkbox"/>
2	What do you like to be about the humidity?				
	Much increase humidity <input type="checkbox"/>	Slightly increase humidity <input type="checkbox"/>	No change <input type="checkbox"/>	Slightly decrease humidity <input type="checkbox"/>	Much decrease humidity <input type="checkbox"/>
3	What do you like to be about the air velocity?				
	Much increase velocity <input type="checkbox"/>	Slightly increase velocity <input type="checkbox"/>	No change <input type="checkbox"/>	Slightly decrease velocity <input type="checkbox"/>	Much decrease velocity <input type="checkbox"/>

#### 4.4 Others

Note.....  
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