

가

A Kansei evaluation for passenger car interior materials

* , * , * **

* , **

Abstract

가 . (crash pad, steering wheel, t.g.s knob, audio panel) 가 30 (S.D)=28.67(6.56) 가 30 가

Key word: Kansei engineering, passenger car interior materials

1.

and Hirasago, 1997). (Jindo

(Kansei engineering)

2.

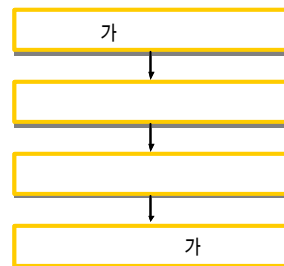
(Nagamachi, 1995).

(Jindo and Hirasago, 1997), (Nakada, 1997), (Tanoue et al., 1997)

(steering wheel) , 가 (embossing)

(: , , 가)

가 1 가



[1] 가

2.1 가

2.1.1

(crash pad, steering wheel, t.g.s knob, audio panel,)



[2] 가

2.1.2 가

RV(recreation vehicle) 가 24 , 6 30 6 , 24

가 6 가 1

[1] 가

crash pad	30
steering wheel	30
t.g.s knob	30
audio panel	28
	14
	7

2.1.3

(Han et al., 2000)

가

2.2

가

(Nishimatsu et al., 2001)

가

13~14 crash pad

2

[2] (: crash pad)

code	Crash Pad
C1	
C2	
C3	
C4	
C5	
C6	(embossing)
C7	
C8	
C9	
C10	
C11	
C12	
C13	

2.3

, crash pad

가

4

(order)가

가

가

가

가

2.4

가

2.4.1

가

가

30

(

(S.D)=28.67(6.56))

가 가 . 30

9

20 (20~29)

가 21 , 30

.

2.4.2

가

(single factor ANOVA)

가 가 30

가
가

Balanced Latin Square

가

modified

magnitude estimation(Han et al., 1999)

0~100

4 가



[4] 가

crash pad

4

[4] (: crash pad)

			*
C1	○*	○	×
C2	○	○	×
C3	○	○	×
C4	×	○	×
C5	○	○	×
C6	○	○	×
C7	○	○	×
C8	○	○	×
C9	○	○	×
C10	○	○	×
C11	○	○	×
C12	○	○	×
C13	○	○	×

* ○: $\alpha=0.05$

3.

가

3.1

가

3

55~70

14~19

가

, 20
가

가

30

3.3

(level)

Duncan

5 crash pad

[3] 가

	20		30			
crash pad	59.0	16.5	64.3	16.5	60.6	16.7
steering wheel	61.3	15.5	64.0	14.5	62.1	15.3
t.g.s. knob	59.4	17.1	63.6	16.1	60.7	15.2
audio panel	58.5	16.3	67.0	15.0	61.1	16.4
	59.5	17.7	62.7	18.1	60.6	17.8
	66.6	16.9	68.7	17.8	67.2	17.2

3.2

[5] (: crash pad)

			*
C1	○	>	9
C2	○	, , , > ** , , ,	16
C3	○		14
C4	×		
C5	○		7.5
C6	○	Pin , ()> 가 , > (),	8, 6
C7	○		18
C8	○		5
C9	○		4
C10	○		4.5
C11	○		7
C12	○		12
C13	○		

* : Duncan

;
 ** > :

()

, 가 (5
) , , , ,
pad , , , 가 crash
.

4.

가 가 가

. 가
report . , Self

가

[1] Han, S.H., Song, M., and Kwahk, J., A systematic method for analyzing magnitude estimation data, International Journal of Industrial Ergonomics 23, pp 513-524, 1999.

[2] Han, S. H., Yun, M. H., Kim, K. J., and Kwahk, J., Evaluation of product usability: Development and validation of usability dimensions and design elements based on empirical models, International Journal of Industrial Ergonomics 26, pp 477-488, 2000.

[3] Jindo, T., and Hirasago, K., Application studies to car interior of Kansei engineering, International Journal of Industrial Ergonomics 19, pp 105-114, 1997.

[4] Nagamachi, M., Kansei engineering: A new ergonomic consumer-oriented technology for product development, International Journal of Industrial Ergonomics 15, pp 3-11, 1995.

[5] Nakada, K., Kansei engineering research on the design of construction machinery, International Journal of Industrial Ergonomics 19, pp 129-146, 1997.

[6] Nishimatsu, T., Kamijoh, M., Toba, E., and Ishizawa, H., Influence of covering fabric for hand feel of automotive seat, JSAE Review 22, pp 372-374, 2001.

[7] Tanoue, C., Ishizaka, K., and Nagamachi, M., Kansei engineering: A study on perception of vehicle interior image, International Journal of Industrial Ergonomics 19, pp 115-128, 1997.