### PHASE 2 and 3 INFORMATION COLLECTION MEASURES

Phase 2 includes a 20-minute interview and a 30-minute paper-and-pencil (or online) questionnaire. These documents are presented in their entirety on the following pages, however, the content of each is described briefly below.

### **Telephone Interview Content**

The telephone interview is designed to obtain demographic information about the participant, as well as basic medical, behavioral, and life history information known to be relevant to driving safety. This includes:

- Age
- Gender
- Height/Weight
- Waist and Neck Size (for calculating Body Mass Index)
- Marital Status
- Number of Children
- Education
- Primary Language
- Driving Experience
- Carrier Description
- Driving Exposure (Day and Night)
- Safety Belt Use

- Crash and Violation History
- Driver Training
- Medical History
- Medication Use (<u>Note:</u> A list of common prescription medications will be adapted into the interview instrument to guide the interviewer. This list will be inserted once the FMCSA Physical Qualifications Division makes it available to the study team (list awaiting approval by its Medical Review Board on April 25, 2007)
- Sleeping Habits
- Caffeine Intake
- Healthy Lifestyle Habits (Alcohol and Tobacco Use, Exercise, and Diet)

#### **Ouestionnaire Content**

The written/online questionnaire is designed to assess various aspects of personality and self-reported risky driving behaviors.

The first 57 items are from the International Personality Item Pool, which is a validated measure of the "Big Five" personality traits. The Big Five are considered the basis of human personality, and research supports this model as predictive of a wide range of behaviors. The Big Five traits are Agreeableness, Conscientiousness, Extraversion, Neuroticism, and Openness to Experience. Several "lie scale" items are also presented in this first section. These items help determine if a respondent is attempting to appear in a favorable light or is otherwise not responding truthfully.

The second section includes 27 items assessing various aspects of one's driving behavior, including hostility felt and expressed while driving. Research has shown hostility is associated with vehicle crashes.

The third section includes 21 items assessing one's level of *sensation seeking*. Individuals who score highly on this measure tend to take more risks, seek excitement, and get bored more easily than individuals who score low on this measure. Past research supports the notion that individuals who take more risks and seek external stimulation from sensation seeking are more likely to experience an injury or be involved in a crash.

The fourth and final section includes 18 items related to one's overall satisfaction at work. Research suggests that individuals who are disgruntled or otherwise unsatisfied with their work may be more prone to crash involvement than those who are satisfied with their work. For example, unsatisfied individuals may not exercise the same level of care in their work-related behavior, which may lead to crash involvement.

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# Driver Risk Factor Study TELEPHONE INTERVIEW SCRIPT

Hi, this is [your name] from the Virginia Tech Transportation Institute, can I speak with [driver's name]. We are conducting a study of commercial vehicle drivers and would like to ask for your participation. You should have received some information about the study in the mail. Do you recall having received anything about this study?

If the person says "yes", ask if they have any questions, then continue with the script below. If the person says "no", apologize and say *Let me tell you about the study*.

The purpose of this study is to explore how personality, attitudes, medical conditions, etc. relate to driving safety. If you would like to participate, we would ask you to complete a 20-minute telephone interview, which we could complete today, as well as a 30-minute written questionnaire we would mail you or you could take on the Internet. You will be paid \$20 for completing the telephone interview, and \$30 for completing the questionnaire that will be mailed to you. The first check for \$20 would be included in the package we mail you with the written questionnaire, and the second check for \$30 would be mailed to you once we receive the completed written questionnaire back from you.

Your responses to the telephone interview and written questionnaire are strictly confidential. Your participation or non-participation will not affect your standing within your company. We have obtained a Certificate of Confidentiality from the Federal government for this study, meaning your confidentiality is protected by law and will not be shared with anyone, even if there is a court subpoena. Further, we will not include your name on any of the study materials. Instead, you will be

assigned a study number which will help us link your telephone interview responses to your written questionnaire responses. Your participation is voluntary, and you may withdraw at any time without experiencing any negative consequences.

If you would like to participate, we could begin today with the telephone survey. Is this a good time for you?

#### If NO, then:

*Is there a better time to reach you?* Record their response and call back at the time indicated. If the driver indicates s/he does not want to participate, thank him/her and hang up.

#### If Yes, then:

Great, before we get started, do you have any questions? Answer participant's questions. If you cannot answer a question, write it down and tell the participant you will call them back with an answer. Contact Jeff or Doug to get the answer.

If the individual has no questions, say: *OK*, *let's begin.Please answer each of the following items as honestly as possible*. *THERE ARE NO RIGHT OR WRONG ANSWERS*.

1.	Date:						
2.	Age:years						
3.	Gender: Male Female						
4.	Height:ftin						
5.	Weight:lbs						
6.	Waist size: inches						
7.	Neck size: inches						
8.	What is your marital status? Single Married Divorced Widowed						
9.	If Married, how long have you been married?						
10.	10. <i>Do you have any children</i> [includes step-children]?  Yes No						
	i. If yes, how many children live at home with you?						
11.	How many years of school have you completed? [High school diploma = 12]						
12.	12. What is the highest academic degree you have earned?						
13.	Is English your primary language? Yes No						

14. How long have you been driving commercial vehicles?	years	months
15. How long have you been working for your current emp	oloyer?years _	months
.6. Type of license and endorsements held:		
License:		
Endorsements: Hazardous Materials Tanker Vehicle Bus Passenger School Bus Double/Triple Trailers Combination HazMat/Ti	railer	
For hire: long-haul/truckload For hire: long-haul/LTL For hire: short-haul/regional Private/long-haul Private: short-haul Other:		
18. Over the past three years, what has been your primary  For hire: long-haul/truckload  For hire: long-haul/LTL  For hire: short-haul/regional  Private/long-haul  Private: short-haul  Pick-up & delivery  Other:	operation?	
19. About how many miles a year of <b>commercial driving</b> o	lo you currently do?	

21. Cur	rently, a	bout	what	percent	t of you	r dri	ving i	s at r	night	[6pm-6ar	n]?	%	
	_		-			-				_	been at night elt?  Yes	t?No	_%
24. Whe	en drivir	ng a <b>c</b> o	omm	ercial v	ehicle,	do y	ou us	ually	wea	r a seat be	elt? Yes	No	
	er the pa		-		-		- ,	ashes Y		ıny vehicle	?? [include a	ny crash repo	orted
	[F	or eac	ch cra	sh, che	ck the <b>t</b>	ype	of ve	hicle	and	fault stat	us]:		
	Comme			sonal	At-Fa	ult		t At-			Crash Type/l	Role	
1	Vehic	le	Ve	hicle			F	ault					
2.													
3.													
4.			[										
5.													
	] Yes <sup>†</sup> [	No	)	·	J		J		,		any vehicle?		
[F									writ		tion type]:		1
1	_	nmero	cial V	ehicle	Pers	onal	Vehi	cle		Vi	olation Type	j	_
1 2	_	[											
3						-							<u> </u>
4													_
5	_												-
27. Over the past three years, have you been put out-of-service in any roadside inspection?  Yes No													
	ſF	or eac	ch OC	)S]: <b>R</b> e	eason:	vehi	cle [b	rakes	s, tire	es, etc.] or	driver [hour	s-of-service,	log
	_	olatio		_			-			, ,	-	Ź	J
					e Viola	tion				Driver V	iolation		
	<u> </u>	1.											
	<del>-</del>	2.											
	H-	3.											
	1.	4.											

	5.		
28. Have you	u gone to truck driver training school?	Yes No	
Ify	v <b>es</b> , how long was the training, in weeks?	>	weeks
7.5			
	your first commercial driving job, did yo udes informal training such as a friend o	_	
Yes	No		
If v	<b>es</b> , how long was the training?	hours/ds	nys/wooks (circlo)
	-		
30. How mu	ch on-the-job training have you received	?	(convert to days/weeks)
	CONTINUE TO THE	NEXT SECT	TION
Okay, now I'n	n going to ask you some questions about	your medical	history.
31. Do you	or have you had any of the following med	dical conditior	ns in the past 3 years?
a.	Diabetes	Yes	No
	High Blood Pressure	Yes	No
	Heart disease (heart attack or other		
	problem with your heart)	Yes	No
d.	Epilepsy or other medical condition		
	that causes seizures	Yes	No
e.	Stroke or bad problem with circulation		
	(where you lose feeling in your hands,		
	feet, legs or arms)	Yes	No
f.	Mental illness for which you take a		
	medication (like Lithium)	Yes	No
g.	Chronic Fatigue Syndrome	Yes	No
h.	Missing limb, hand or foot	Yes	No
	i. Specify:		

i.	Chronic back pain Yes No
	If <b>yes</b> Mild Moderate Severe
j.	Asthma or other respiratory conditions Yes No
	If <b>yes</b> Mild Moderate Severe
k.	Migraine or other severe headaches Yes No
	If <b>yes</b> Mild Moderate Severe
l.	Musculoskeletal disease (like arthritis)  Yes  No
	If <b>yes</b> Mild Moderate Severe
m.	Other medical condition(s)  Yes No
	i. Specify:
Do you k	nave normal or corrected to normal hearing? \textstyle Yes \textstyle No
2. Do you i	lave normal or corrected to normal nearing!1 es1 vo
If no, ple	ease clarify:
3. Do you l	nave normal or corrected to normal vision? Yes No
If no nle	pasa alarifu
11 110, pie	ease clarify:
4. Are you	currently taking any prescription medications on a regular basis? Yes No
Lipitor will be	please tell me what medications you take and what conditions they are for [example: for high cholesterol] As indicated above, a list of common prescription medications inserted here to guide the interviewer once the list is made available by the Medical w Board)
	currently take any non-prescription medications on a regular basis?
-	please tell me what medications you take and what conditions they are for [example: ol PM for sleeping]

36. I will now ask you some question "1" means "NONE" and "10" the following?			-	-	_				•	
]	None			M	Iodera	te				Severe
Snoring	1	2	3	4	5	6	7	8	9	10
Difficulty Falling Asleep	1	2	3	4	5	6	7	8	9	10
Difficulty Staying Asleep	1	2	3	4	5	6	7	8	9	10
Difficulty Waking Up	1	2	3	4	5	6	7	8	9	10
Daytime Sleepiness	1	2	3	4	5	6	7	8	9	10
37. Have you ever been diagnosed	with	or si	uffer f	from	any o	f the	follo	wing	?	
Sleep Apnea		Yes		lo	If <b>Ye</b> s	5,	Milo	i	Mod	lerate Severe
Insomnia		Yes		Го	If <b>Ye</b> s	5, 🗌	Milo		Mod	erate Severe
38. In general, do you keep a regular sleep schedule? Yes Sometimes No  39. Overall, about how many hours of actual sleep do you usually get in a 24-hour period?										
_	-		_	_	-		_			_
40. What kind of sleeper do you consider yourself? Light Normal Heavy										
41. Do you often feel uncomfortab	ly sle	еру с	during	g the	day?	Y	es _	∐ No		
i. If yes, how	often	?				_				
42. Do you often have an irresistib	le ur	ge to	sleep	or f	fall as	leep	unex	pecte	dly?	Yes No
i. If yes, how often?										

43. <i>Do you usually nap during the day (or between major sleep periods)?</i> [Note: Naps may be of any duration.] Yes No
44. <i>Do you drink coffee or other caffeinated beverages</i> [If asked, specify tea, Coke, Pepsi, Mountain Dew, etc. Also, if asked, caffeine pills such as "No Doz" can be included]  Yes No
i. If yes, how many cups/glasses per day?
45. Do you drink alcohol? Yes No
<ul><li>i. If yes, how often?</li><li>ii. If yes, how many alcoholic drinks do you average in a day?</li></ul>
46. Do you currently smoke cigarettes or use other tobacco products?   Yes No
47. When you are not working, do you find time to exercise? Yes No
i. If yes, how often?
48. How would you describe your diet? Poor Average Excellent

That was the end of the telephone interview. Thank you for participating. A check for \$20 will be mailed to your home address along with the written questionnaire I mentioned earlier. If you have any questions or concerns in the meantime, you can contact me at (540) 231-15XX. Again, thank you for your participation.

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Subject :	#				

## **Commercial Motor Vehicle Driver Questionnaire**

Virginia Tech Transportation Institute

Thank you for taking the time to complete this questionnaire. Your responses will be kept strictly confidential, so please do not write your name or other identifying information on this document. Please be candid and honest when completing this questionnaire. There are no right or wrong answers. If you cannot decide on an answer or are uncomfortable about the question, you may leave it blank. There are four sections to this questionnaire. Please read the instructions for each section carefully.

Section I. Below are 57 statements regarding your opinions of yourself. Read each statement carefully. For each statement choose the response that best represents your opinion of yourself by marking an "X" through the box to the left of the response.

1. I am the life of the	ne party.			
Strongly Disagree	Disagree	[Neutral]	Agree	Strongly Agree
2. I am interested in	people.			
Strongly Disagree	$igl[  ext{Disagree} igr]$	[Neutral]	Agree	Strongly Agree
3. I am always prep	ared.			
Strongly Disagree	$igl[  ext{Disagree} igr]$	[Neutral]	[Agree]	Strongly Agree

4. I am relaxed mos	at of the time.							
Strongly Disagree	Disagree	[Neutral]	Agree	Strongly Agree				
5. There have been occasions when I have taken advantage of someone.								
Strongly Disagree	Disagree	[Neutral]	[Agree]	Strongly Agree				
6. I have a rich voc	abulary.							
Strongly Disagree	$igl[  ext{Disagree} igr]$	[Neutral]	[Agree]	Strongly Agree				
7. I feel comfortable	e around peop	ole.						
Strongly Disagree	$igl[  ext{Disagree} igr]$	[Neutral]	[Agree]	Strongly Agree				
8. I sympathize with	h others' feeli	ngs.						
Strongly Disagree	$igl[  ext{Disagree} igr]$	[Neutral]	Agree	Strongly Agree				
9. I pay attention to	details.							
Strongly Disagree	$igl[  ext{Disagree} igr]$	[Neutral]	[Agree]	Strongly Agree				
10. I am always a g	good listener,	no matter wh	ıo I'm talki	ng to.				
Strongly Disagree	$igl[  ext{Disagree} igr]$	[Neutral]	Agree	Strongly Agree				
11. I seldom feel dep	ressed.							
Strongly Disagree	Disagree	[Neutral]	Agree	Strongly Agree				
12. I have a vivid im	agination.							
Strongly Disagree	$igl[  ext{Disagree} igr]$	[Neutral]	Agree	Strongly Agree				
13. I start conversation	ons.							
Strongly Disagree	$igl[  ext{Disagree} igr]$	[Neutral]	[Agree]	Strongly Agree				
14. I have a soft hear	t.							
Strongly Disagree	$igl[  ext{Disagree} igr]$	[Neutral]	[Agree]	Strongly Agree				
15. I am always co	urteous, even	to people wh	no are disag	reeable.				
Strongly Disagree	Disagree	[Neutral]	Agree	Strongly Agree				
16. I get chores done	right away.							
Strongly Disagree	$igl[  ext{Disagree} igr]$	[Neutral]	[Agree]	Strongly Agree				
17. I get stressed-out	easily.							
Strongly Disagree	Disagree	[Neutral]	[Agree]	Strongly Agree				
18. I have excellent i	deas.							
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree				

19. I talk to a lot of d	ifferent people	e at parties.						
Strongly Disagree	Disagree	[Neutral]	Agree	Strongly Agree				
20. I have sometimes taken unfair advantage of another person.								
Strongly Disagree	Disagree	$igl[  ext{Neutral} igr]$	[Agree]	Strongly Agree				
21. I take time out for	r others.							
Strongly Disagree	$igl[  ext{Disagree} igr]$	$igl[  ext{Neutral} igr]$	[Agree]	Strongly Agree				
22. I like order.								
Strongly Disagree	$igl[  ext{Disagree} igr]$	$igl[  ext{Neutral} igr]$	[Agree]	Strongly Agree				
23. I worry about thir	ngs.							
Strongly Disagree	Disagree	$igl[  ext{Neutral} igr]$	[Agree]	Strongly Agree				
24. I am quick to und	erstand things	S.						
Strongly Disagree	Disagree	$igl[  ext{Neutral} igr]$	[Agree]	Strongly Agree				
25. I am always wil	lling to admit	when I've m	ade a mista	ke.				
Strongly Disagree	Disagree	$igl[  ext{Neutral} igr]$	[Agree]	Strongly Agree				
26. I don't mind bein	g the center of	f attention.						
Strongly Disagree	Disagree	$igl[  ext{Neutral} igr]$	[Agree]	Strongly Agree				
27. I feel others' emo	tions.							
Strongly Disagree	Disagree	$igl[  ext{Neutral} igr]$	[Agree]	Strongly Agree				
28. I follow a schedu	le.							
Strongly Disagree	$igl[  ext{Disagree} igr]$	$igl[  ext{Neutral} igr]$	[Agree]	Strongly Agree				
29. I am easily distur	bed.							
Strongly Disagree	$igl[  ext{Disagree} igr]$	$igl[  ext{Neutral} igr]$	[Agree]	Strongly Agree				
30. I sometimes try	to get even ra	ther than for	give and fo	orget.				
Strongly Disagree	Disagree	$igl[  ext{Neutral} igr]$	[Agree]	Strongly Agree				
31. I use difficult wor	rds.							
Strongly Disagree	$igl[  ext{Disagree} igr]$	$igl[  ext{Neutral} igr]$	[Agree]	Strongly Agree				
32. I don't talk a lot.								
Strongly Disagree	Disagree	$igl[  ext{Neutral} igr]$	Agree	Strongly Agree				
33. I make people fee	el at ease.							
Strongly Disagree	Disagree	[Neutral	]Agree	Strongly Agree				

34. I am exacting in n	ny work.							
Strongly Disagree	$igl[  ext{Disagree} igr]$	[Neutral	Agree	Strongly Agree				
35. I sometimes feel resentful when I don't get my own way.								
Strongly Disagree	Disagree	[Neutral]	Agree	Strongly Agree				
36. I get upset easily.								
Strongly Disagree	$igl[  ext{Disagree} igr]$	[Neutral]	Agree	Strongly Agree				
37. I spend time reflec	cting on things	5.						
Strongly Disagree	$igl[  ext{Disagree} igr]$	[Neutral	Agree	Strongly Agree				
38. I keep in the back	ground.							
Strongly Disagree	$igl[  ext{Disagree} igr]$	[Neutral]	Agree	Strongly Agree				
39. I am not really int	erested in othe	ers.						
Strongly Disagree	$igl[  ext{Disagree} igr]$	[Neutral]	Agree	Strongly Agree				
40. I leave my belong	ings laying ar	ound.						
Strongly Disagree	$igl[  ext{Disagree} igr]$	[Neutral	Agree	Strongly Agree				
41. I change my mood	d a lot.							
Strongly Disagree	$igl[  ext{Disagree} igr]$	[Neutral]	Agree	Strongly Agree				
42. I am full of ideas.								
Strongly Disagree	[Disagree	[Neutral]	Agree	[Strongly Agree				
43. I have little to say								
Strongly Disagree	[Disagree	[Neutral]	Agree	Strongly Agree				
44. I insult people.								
Strongly Disagree	[Disagree	[Neutral]	Agree	Strongly Agree				
45. I make a mess of	things.							
Strongly Disagree	$igl[  ext{Disagree} igr]$	[Neutral]	Agree	Strongly Agree				
46. I have frequent m	ood swings.							
Strongly Disagree	$igl[  ext{Disagree} igr]$	[Neutral]	Agree	Strongly Agree				
47. I have difficulty understanding abstract ideas.								
Strongly Disagree	$igl[  ext{Disagree} igr]$	[Neutral]	Agree	Strongly Agree				
48. I don't like to draw attention to myself.								
Strongly Disagree	Disagree	[Neutral	Agree	Strongly Agree				

49	. I am not interested	in other peop	ole's problen	ıs.	
[St	trongly Disagree	Disagree	[Neutral	Agree	Strongly Agree
50	. I often forget to pu	ıt things back	in their prop	er place.	
[St	trongly Disagree	Disagree	[Neutral	Agree	Strongly Agree
51	. I get irritated easil	y.			
[St	trongly Disagree	Disagree	[Neutral]	Agree	Strongly Agree
52	. I am not interested	l in abstract id	leas.		
[St	trongly Disagree	Disagree	[Neutral]	Agree	Strongly Agree
53	. I am quiet around	strangers.			
[St	trongly Disagree	Disagree	[Neutral	[Agree]	Strongly Agree
54	. I feel little concern	for others.			
[St	trongly Disagree	Disagree	[Neutral]	[Agree]	Strongly Agree
55	. I neglect my duties	S.			
[St	trongly Disagree	Disagree	[Neutral	Agree	Strongly Agree
56	. I often feel depress	sed.			
[St	trongly Disagree	Disagree	[Neutral]	Agree	Strongly Agree
57	. I do not have a goo	od imaginatio	n.		
]St	trongly Disagree	Disagree	[Neutral	[Agree]	Strongly Agree
		_	-	_	ase note the rating scale has changed response by marking it with an "X".
1.	I drive when I am		<b>-</b>	т	
	[Never ] Rarely So		Often	Always	
2.	I lose my temper v	_	T	т	
	[Never ] Rarely So		-	Always	
3.	I consider the action		_	_	te or "stupid."
	Never Rarely So	metimes	Often	Always	
4.	I flash my headligh		_	_	iver.
	[Never Rarely So	metimes	Often	Always	
5.	I would tailgate a	driver who an	noys me.		
	[Never ] Rarely So	metimes	]Often	Always	

6.	I will illegally pass a car/truck that i	s going <u>too</u> slowly.					
	$\big[ Never \big] Rarely \big[ Sometimes$	Often Always					
7.	When I get stuck in a traffic jam I go	et <u>very</u> irritated.					
	[Never] Rarely [Sometimes	[Often ] Always					
8.	When someone cuts me off, I feel I	should punish him/her.					
	$\big[ Never \big[ Rarely \big] Sometimes$	Often Always					
9.	I get impatient and/or upset when I	fall behind schedule when I am driving.					
	$\big[ Never \big[ Rarely \big] Sometimes$	Often Always					
10	10. I get irritated when a car/truck in front of me slows down for no reason.						
	[Never] Rarely [Sometimes	Often Always					
11	. I feel it is my right to get where I ne						
	[Never ] Rarely [Sometimes	Often Always					
12	. I feel that <u>passive</u> drivers should lea	rn how to drive or stay home.					
	[Never [Rarely] Sometimes	[Often ] Always					
13	. I feel that I may lose my temper if I	have to confront another driver who has annoyed me.					
	[Never] Rarely [Sometimes]	[Often ] Always					
14	. I consider myself to be a risk-taker.						
	$\big[ Never \big[ Rarely \big] Sometimes$	[Often ] Always					
15	. I feel that most traffic "laws" could	be considered as suggestions.					
	$\big[ Never \big[ Rarely \big] Sometimes$	[Often ] Always					
16	. I make rude gestures (for example,	giving the "finger" or yelling curse words) toward drivers					
	who annoy me.						
	$\big[ Never \big[ Rarely \big] Sometimes$	[Often ] Always					
17	. I deliberately use my car/truck to blo	ock drivers who tailgate me.					
	$\big[ Never \big[ Rarely \big] Sometimes$	[Often ] Always					
18	. I feel it is my right to strike back in	some way if I feel another driver has been aggressive					
	toward me.						
	$\big[ Never \big] Rarely \big[ Sometimes$	[Often ] Always					
19	. I will weave in and out of slower tra	ffic.					

$\big[ Never \big] Rarely \big] Sometimes$	[Often ] Always				
20. Passengers in my car/truck tell me to	calm down.				
$\big[ Never \big] Rarely \big] Sometimes$	[Often ] Always				
21. Other factors being equal, I drive slo	ower in the dark than during daylight.				
$\big[ Never \big] Rarely \big] Sometimes$	[Often ] Always				
22. Other factors being equal, I drive slo	ower on unfamiliar than familiar roads.				
$\big[ Never \big] Rarely \big] Sometimes$	[Often ] Always				
23. Other factors being equal, I drive slo	ower in a light rain than when it is dry.				
$\big[ Never \big] Rarely \big] Sometimes$	[Often ] Always				
24. In my personal vehicle, I tend to driv	ve faster than other drivers.				
$\big[ Never \big] Rarely \big] Sometimes$	[Often ] Always				
25. When driving my commercial vehic	le on the highway, I tend to drive faster than other				
commercial drivers.					
$\big[ Never \big[ Rarely \big] Sometimes$	[Often ] Always				
26. I find it exciting to drive fast, even is					
$\big[ Never \big[ Rarely \big] Sometimes$	[Often ] Always				
27. I enjoy seeing the scenery along high	hways, and will stop at scenic overlooks just to enjoy the				
scenery.					
[Never] Rarely [Sometimes	[Often ] Always				
Section III. Each of the 21 items below contains two choices. Please indicate which of the choices most describes your likes or the way you feel, even if it's not 100%. Please respond to all items with only one choice. We are interested only in your likes or feelings, not in how others feel or how one is "supposed" to feel. Be frank and give your honest appraisal of yourself.					
1. I like "wild" uninhibited parties.					
I prefer quiet parties with good c	onversation.				
2. There are some movies I enjoy some I can't stand watching a movie the	eeing a second or even third time. nat I've seen before.				
3. I often wish I could be a mountain	in climber.				

	I can't understand people who risk their necks climbing mountains.
4.	<ul><li>☐ I like to explore a strange city or section of town by myself, even if it means getting lost.</li><li>☐ I prefer a guide when I am in a place I don't know well.</li></ul>
5.	<ul><li>I dislike people who do or say things just to shock or upset others.</li><li>When you can predict almost everything a person will do and say he or she must be a bore.</li></ul>
6.	<ul> <li>I usually don't enjoy a movie or play where I can predict what will happen in advance.</li> <li>I don't mind watching a movie or play where I can predict what will happen in advance.</li> </ul>
7.	<ul><li>A sensible person avoids activities that are dangerous.</li><li>I sometimes like to do things that are a little frightening.</li></ul>
8.	<ul><li>I would like to take off on a trip with no preplanned or definite routes or timetable.</li><li>When I go on a trip I like to plan my route and timetable fairly carefully.</li></ul>
9.	<ul><li>☐ I prefer the "down to earth" kinds of people as friends.</li><li>☐ I would like to make friends in some of the "far-out" groups like artists or "punks."</li></ul>
10.	. I would not like to learn to fly an airplane.  I would like to learn to fly an airplane.
11.	. I would like to try parachute jumping.  I would never want to try jumping out of a plane, with or without a parachute.
12.	I am not interested in experience for its own sake.  I like to have new and exciting experiences and sensations even if they are a little frightening, unconventional, or illegal.

13. The essence of good art is in its clarity, symmetry of form, and harmony of colors.  I often find beauty in the "clashing" colors and irregular forms of modern paintings
14. I enjoy spending time in the familiar surroundings of home.  I get very restless if I have to stay around home for any length of time.
15. I like to dive off the high board.  I don't like the feeling I get standing on the high board (or I don't go near it at all).
16. I like to date persons who are physically exciting.  I like to date persons who share my values.
17. Heavy drinking usually ruins a party because some people get loud and boisterous.  Keeping the drinks full is the key to a good party.
18. People should dress according to some standard of taste, neatness, and style.  People should dress in individual ways even if the effects are sometimes strange.
19. Sailing long distances in small sailing crafts is foolhardy.  I would like to sail a long distance in a small but seaworthy sailing craft.
20. I have no patience with dull or boring persons.  I find something interesting in almost every person I talk to.
21. Skiing down a high mountain slope is a good way to end up on crutches.  I think I would enjoy the sensation of skiing very fast down a high mountain slope.

## **CONTINUE TO NEXT SECTION**

# Section IV. Below are 18 statements about your opinions related to your work. Please read each statement and circle your response based on the following scale:

Circle: 1 for "Yes" if it describes your work

2 for "No" if it does not describe it

3 for "?" if you cannot decide

#### **JOB IN GENERAL**

Think of your job in general. All in all, what is it like most of the time? For each of the following words or phrases, circle:

	Yes	No	?
Pleasant	1	2	3
Bad	1	2	3
Ideal	1	2	3
Waste of time	1	2	3
Good	1	2	3
Undesirable	1	2	3
Worthwhile	1	2	3
Worse than most			3
Acceptable	1	2	3
Superior	1	2	3
Better than most	1	2	3
Disagreeable			3
Makes me content	1	2	3
Inadequate	1	2	3
Excellent		2	3
Rotten	1	2	3
Enjoyable	1	2	3
Poor	1	2	3

Thank you for completing this questionnaire. Please use the self-addressed, self-stamped envelope we provided to mail this questionnaire back to the Virginia Tech Transportation Institute. Once we have received your completed questionnaire, we will mail you a check for \$30.

#### PHASE 3 INFORMATION COLLECTION MEASURES

Phase 3 testing includes the following components:

- Medical examination. An examination mirroring the Medical Examination for Commercial Driver Fitness Determination (Form 649-F) procedure will be performed.
- Introduction and Interview. Information regarding employment, accident, and violation status will be assessed.
- Test of general intelligence (Matrices test). This is a picture-based test assessing reasoning ability.
- Useful Field of Vision Test. This test assesses visual processing speed as well as selective and divided attention ability.
- Personality/Behavior Questionnaire. This questionnaire addresses several personality and behavior constructs shown to be related to driving safety.

#### **Legal Use of the Submitted Materials**

#### **Matrices Test**

Matrices items are copyrighted and approved for use under terms of the Harcourt Assessment, Inc. (San Antonio, Texas) licensure agreement. Copyright 1976, J.C. Raven, LTD. This publication may not be resold, rented, lent, leased, exchanged, given, or otherwise disposed of to third parties except with the authorization of the publishers or the copyright proprietor, J.C. Raven, LTD. No portion of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means electronic, mechanical, photocopying, recording or otherwise without prior authorization of the publishers or the copyright proprietor, J.C. Raven, LTD.

### **Useful Field of Vision Test**

UFOV is a registered trademark of Visual Awareness, Inc. (Birmingham, Alabama). The Version 6.0.9 software is protected by U.S. Patent Nos. 4,971,434 and 5,801,810 approved for use under the company's licensure agreement (2002). All rights reserved. Copyright is claimed in both the underlying software and the resulting output in the form of the computer screen displays.

#### Personality/Behavior Test

Development Associates (Arlington, VA) is under license to use this test. All rights reserved (2006). Any unauthorized reproduction or use of the contents in this questionnaire is prohibited.

## **Phase 3 Logistics**

#### **Summary**

The research team will use facilities for the interview and computer-based tests that are near or colocated with the medical examination locations. We will coordinate with the medical examination vendor to identify interview sites and establish testing schedules. Participants will be provided directions to the medical office. A copy of the participant's signed medical release form will accompany the instructions to the physician.

#### Introduction Instructions:\_

Script: Hello, my name is [your name]. Thank you for volunteering for this phase of the research. Again, the purpose of this study is to explore how personality, attitudes, medical conditions, etc. relate to driving safety. As stated in the materials that you received in the mail, participation is voluntary and you will receive \$200. As part of this phase, you will complete a medical examination and three computer-based tests. The three tests consist of a questionnaire, a puzzle-like test, and a test identifying targets. We hope you'll find them interesting. We anticipate the medical examination taking about 1 hour and each of the computer tests taking about 20-30 minutes. If at any time you become uncomfortable about the testing you may request an explanation, a break, or you may discontinue testing. Keep in mind that the results are being used for research purposes and will have no effect on your job status or career. Your identity and test results will be completely confidential. Do you have any questions before you begin?

Before we get started, I need to see your CDL to verify your identity and then have you read and sign a consent form.

When the participant is ready, have them sign the consent form and let them know where the bathroom and other comforts are (coffee, water). You want them to be as relaxed as possible.

#### **Medical Examination**

The research team will coordinate with the medical examination vendor to identify interview sites and establish testing schedules. A copy of the participant's signed medical release form will accompany the instructions to the physician. The examination will proceed as indicated in the Medical Examination Report for Commercial Driver Fitness Determination (Form 649-F) procedure, which is illustrated in the figures on the following pages. In addition, the physician will specifically ask the following questions about sleep apnea:

- Have you ever been diagnosed or are you believed to have sleep apnea? (The physician may have to explain what it is and its related symptoms.
- If so, have you had corrective surgery and what have the results been?

The examination proceeds in this general order.

- Health history questions: Driver provides answers, but medical examiner can discuss (includes epilepsy, apnea, diabetes)
- Vision: Static visual acuity; horizontal field of vision, depth, color
- Hearing: Distance; audiometer

- Blood pressure; pulse rate
- Urinalysis: check for blood, sugar, protein, and alcohol
- Physical Examination

The research staff will track and monitor the conduct of the medical examinations by observing the medical facility and debriefing the respondent about the content of the medical examination.

#### **Medical Examination Instructions:**

*Script:* [*Participant's name*] this is [*Physician's name*]. He/She will be performing the medical examination. The examination follows the standard Form 649-F procedures. Let the physician take the participant into the examination room.

OMB NO: 2126-XXXX EXPIRATION DATE: mm/dd/yyyy

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2126-XXXX. Public reporting for this collection of information is estimated to be approximately 4 hours per response, including the time for reviewing instructions, gathering the data needed, and completing and reviewing the collection of information. All responses to this collection of information are voluntary. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to: Information Collection Clearance Officer, Federal Motor Carrier Safety Administration, MC-RRA, Washington, D.C. 20590.

#### Medical Examination Report FOR COMMERCIAL DRIVER FITNESS DETERMINATION

649-F (6045)

1. DRIVER'S INFORMATION	Driver completes th						,
Driver's Name (Last, First, Middle)	)	Social Security No	).	Birthdate M / D / Y	Age	□м	New Certification
Address  2. HEALTH HISTORY Driver	City, State, Zip		Work Tel Home Te	. ,		License	A C B D Other
Yes No  Any liness or injury in the last 5 y Head/Brain injuries, disorders or ill Gelaures, epileosy medication.  By disorders or impaired vision (e Bar disorders, loss of hearing or bit Heard disease or heart attack, othe medication.  Heart surgery (value replacement) pacemaker) High blood pressure Muscular disease Shortness of breath	ears? nesses except corrective lens slance or cardiovascular cone ypass, angioplasty, on	Yes No	Lung diseas Kidney dise Liver diseas Digestive pr Diabetes pilis pilis insulin Nervous or medic	ie, emphysema, asthma ase, dialysis ie obiems elevated blood sugar or psychiatric disorders, e. atlon	g., severe	bronchitis by: e depressi	Yes No  Fainling, dizziness Siepe disorders, pauses in breathing white asleep, dayfire sleepiness, loud snoring  Sitoke or paralysis Missing or impared hand, arm, foot, leg, inger, soe Sonal injury or disease
certify that the above information Medical Examiner's Certificate.	is complete ar Driver's Sign		nd that ina	ccurate, false or mi	ssing in	formatic	ion may invalidate the examination and my
Medical Examiner's Comments of medications, including over-the-co							friver any "yes" answers and potential hazard )

TESTING	TESTING (Medical Examiner completes Section 3 through 7) Name: Last, First, Middle,									
3. VISIO	<ol> <li>VISION</li> <li>Standard: At least 20/40 acuity (Snellen) in each eye with or without correction. At least 70 degrees peripheral in horizontal meridian measured in each eye. The use of corrective lenses should be noted on the Medical Examiner's Certificate.</li> </ol>									
INSTRUCTIONS: When other than the Snellen chart is used, give test results in Snellen-comparable values. In recording distance vision, use 20 feet as normal. Report visual acuity as a ratio with 20 as numerator and the smallest type read at 20 feet as denominator. If the applicant wears corrective lenses, these should be worn while visual acuity is being tested. If the driver habitually wears contact lenses, or intends to do so while driving, sufficient evidence of good tolerance and adaptation to their use must be obvious. Monocular drivers are not qualified.										
Numerical rea	adings must be pro	vided.			Applicant can recognize and distinguish among traffic control  Yes signals and devices showing standard red, green, and amber colors?					
ACUITY	UNCORRECTED	CORRECTED	HORIZONTAL	FIELD OF VISION	signals and device	s snowing stan	idard red, green,	and amber co	ors ?	☐ No
Right Eye	20/	20/	Right Eye	•	Applicant meets v		equirement only	when wearing	ng:	
Left Eye	20/	20/	Left Eye	ō	Corrective L	enses				
Both Eyes	20/	20/			Monocular Vision:	Yes	No			
Complete nex	Complete next line only if vision testing is done by an opthalmologist or optometrist									
Date of Exam	ination Name of O	phthalmologist o	Optometrist (	(print) Tel. No.	Licen	se No./ State	of Issue	Signa	ture	
4. HEARIN	Check if h	earing aid used f	or tests.	Check if hearing a	5 ft., with or without iid required to meet sta	andard.		-		_
	NS: To convert audio ted and divide by 3.	metric test results i	rom ISO to AN	SI, -14 dB from ISO	for 500Hz, -10dB for 1,0	00 Hz, -8.5 dB	for 2000 Hz. To	average, add	the reading	gs for 3
	dings must be reco						Right Ear		Left Ear	
	ance from individual a ed voice can first be		ar Left Ea \ Feet	". = .   D)    a	audiometer is used, record hearing loss in cibels. (acc. to ANSI Z24.5-1951)		500 Hz 1000	Hz 2000 Hz	500 Hz	1000 Hz 2000 Hz
							Average:		Average:	
5. BLOOD F	RESSURE/ PULSE	RATE Num	erical reading	s must be recor	ded. Medical Examin	er should ta	ke at least two	readings to	confirm	BP.
Blood	Systolic Diastolic	Reading	l	Category	Expiration Date			Recertificat	ion	
Pressure Driver qualifie	ed if <u>&lt;</u> 140/90.	140-159	90-99	Stage 1	1 year			1 year if <14 One-time ce 141-159/91-	rtificate fo	r 3 months if
Pulse Rate:	☐ Regular ☐ Irregula	ar 160-179	100-109	Stage 2	One-time certificate	for 3 months	i.			am if <u>&lt;</u> 140/90
		≥180/11	0	Stage 3	6 months from date	of exam if <	140/90	6 months if s	140/90	
Urinalysis is requ	8. LABORATORY AND OTHER TEST FINDINGS  Numerical readings must be recorded.  URINE SPECIMEN  SP. GR. PROTEIN BLOOD SUGAR  URINE SPECIMEN									
Other Testing (D	Other Testing (Describe and record)									

7.	PHYSICAL EXAMINATION	Height:	(in.) Weight:	(lbs.)	Name: Last,	First,	Middle,

The presence of a certain condition may not necessarily disqualify a driver, particularly if the condition is controlled adequately, is not likely to worsen or is readily amenable to treatment. Even if a condition does not disqualify a driver, the medical examiner may consider deferring the driver temporarily. Also, the driver should be advised to take the necessary steps to correct the condition as soon as possible particularly if the condition, if neglected, could result in more serious illness that might affect driving.

Check YES if there are any abnormalities. Check NO if the body system is normal. Discuss any YES answers in detail in the space below, and indicate whether it would affect the driver's ability to operate a commercial motor vehicle safely. Enter applicable item number before each comment. If organic disease is present, note that it has been compensated for. See <u>Instructions to the Medical Examiner</u> for guidance.

BODY SYSTEM	CHECK FOR:	YES*	NO	BODY SYSTEM	CHECK FOR:	YES"	NO
. General Appearance	Marked overweight, tremor, signs of alcoholism, problem drinking, or drug abuse.			7. Abdomen and Viscera	Enlarged liver, enlarged spieen, masses, bruits, hemia, significant abdominal wall muscle		
. Eyes	Pupillary equality, reaction to light, accommodation, ocular motility, ocular muscle imballance, extraocular movement, nystagmus, exophthalmos. Ask about retinopathy, cataracts, ashakia, glaucoma, macular degeneration and refer to a			8. Vascular System	weakness.  Abnormal pulse and amplitude, cartoid or arterial bruits, varicose veins.		
	specialist if appropriate.			9. Genito-urinary System	Hernias.		
Ears Mouth and Throat	Scarring of tympanic membrane, occlusion of external canal, perforated eardrums.			10. Extremities- Limb impaired. Driver may be subject to SPE	Loss or impairment of leg, foot, toe, arm, hand, finger, Perceptible limp, deformities, atrophy, weakness, paralysis, clubbing, edema,		
	Irremediable deformities likely to interfere with breathing or swallowing.			certificate if otherwise qualified.	hypotonia. Insufficioent grasp and prehension in upper limb to maintain steering wheel grip. Insufficient mobility and strength in lower limb to operate pedals properly.		
. Heart	Murmurs, extra sounds, enlarged heart, pacemaker, implantable defibrillator.			11. Spine, other musculoskeletal	Previous surgery, deformities, limitation of motion, tenderness.		
Lungs and chest, not including breast examination	Abnormal chest wall expansion, abnormal respiratory rate, abnormal breath sounds including wheezes or alveolar rales, impaired respiratory function, cyanosis. Abnormal findings on			12. Neurological	Impaired equilibrium, coordination or speech pattern; asymmetric deep tendon reflexes,		
	physical exam may require further testing such as pulmonary tests and/ or xray of chest.				sensory or positional abnormalities, abnormal patellar and Babinki's reflexes, ataxia.		
COMMENTS:							_
Note certification st	atus here. See <u>Instructions to the Medical Examiner</u> for guidance	<u>.</u>		□ Wearing corrective			<u></u>
☐ Meets standa	rds in 49 CFR 391.41; qualifies for 2 year certificate	e.		☐ Wearing hearing a ☐ Accompanied by a	dwaiver/ exemption. Driver	must p	present
☐ Meets standa	rds in 49 CFR 391.41; qualifies for 2 year certificate			☐ Wearing hearing al ☐ Accompanied by a exemption at time	dwaiver/ exemption. Driver of certification.	must p	oresent
☐ Meets standa ☐ Does not mee	rds in 49 CFR 391.41; qualifies for 2 year certificate			Wearing hearing a  Accompanied by a exemption at time Skill Performance Driving within an Qualified by opera	dwaiver/ exemption. Driver of certification.  Evaluation (SPE) Certificate exempt intracity zone (See 49 CFR 391.62) tion of 49 CFR 391.64	•	
☐ Meets standa☐ Does not mee☐ Meets standa☐ Driver qualifie	rds in 49 CFR 391.41; qualifies for 2 year certificate et standards rds, but periodic monitoring required due to	_			dwaiver/ exemption. Driver of certification.  Evaluation (SPE) Certificate exempt intracity zone (See 49 CFR 391.62)	•	

#### **Interview**

Upon completion of the medical examination, a member of the research team will escort the participant to the interview and testing location. The main purpose of the interview is to assess whether any significant changes to the drivers accident, violation, or driving patterns have changed since Phase 2. Therefore, the following questions from Phase 2 will be repeated in a verbal form:

[Script] 1. Since you completed the Phase 2 questionnaire on [state the Phase 2 questionnaire date], have you had any crashes in any vehicle? If yes, describe the **type of vehicle** and **fault status**:

1	. Commercial Vehicle	Personal Vehicle	At-Fault	Not At- Fault	Crash Type/Role
2	•				

2. Since you completed the Phase 2 questionnaire, have you had any moving violations in any vehicle?

If yes, describe the type of vehicle and violation type:

J.	<u> </u>			
	3.	Commercial	Personal	Violation Type
		Vehicle	Vehicle	
	4.			

3. Since you completed the Phase 2 questionnaire, have you been put out-of-service in any roadside inspection?

If yes, describe the **Reason**: vehicle [brakes, tires, etc.] or driver [hours-of-service, log violation, etc.]?

5	. Vehicle Violation	Driver Violation
6	•	

4. Since you completed the Phase 2 questionnaire, has the amount of driving you do changed significantly?

If yes, state how it has changed -- more or less driving and to what extent. If possible, state the answer in terms of mileage or percentages.

5. Since you completed the Phase 2 questionnaire, has the amount of driving you do at night changed significantly?

If yes, state how it has changed -- more or less driving at night and to what extent. If possible, state the answer in terms of mileage or percentages.

6. Since you completed the Phase 2 questionnaire, are you still working for the same employer? *If no, state how many employer changes have occurred.* 

### **Matrices Test (Test of General Intelligence)**

The Matrices test consists of 55 items. Each item contains a figure with a cut out space, and 6 or 8 alternatives that could complete the figure. One of the alternatives completes the figure correctly.

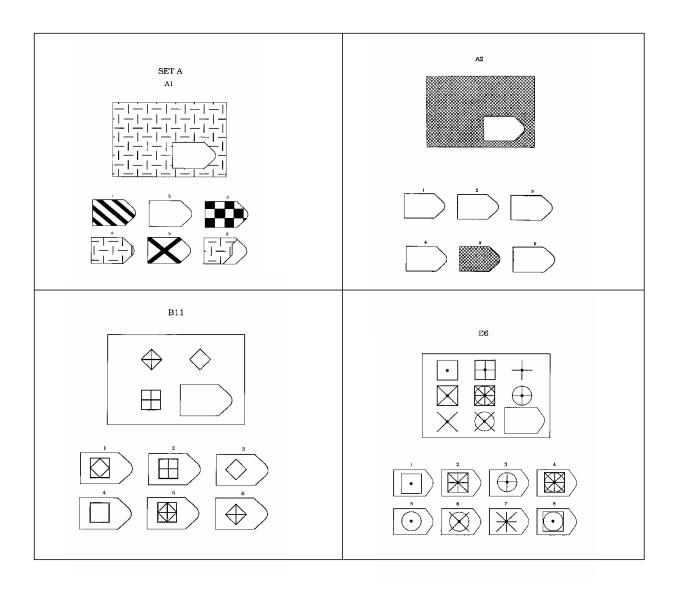
Four Matrices example items are shown below. The first two (A1, A2) require the participant to recognize pattern continuation, while the last two (B11, E6) require the use of abstract-analytical reasoning.

#### **Matrices Test Instructions:**

[script] This first test is made up of a series of picture-based puzzles. On each screen, there is a pattern with a piece missing and several alternative pieces below that may correctly complete the pattern. Only one of these is the correct answer. Choose which piece is the right one. Then click OK to go to the next screen. Do this until you reach the end of the test. You may go back to review a previous puzzle.

The problems are easier at the beginning and more difficult toward the end. Do not skip any problem. If you are not sure what the correct answer is, make a guess. Work at your own pace, but do not spend too much time on any one problem. Time needed to complete the test is recorded. Let me know when you have finished. There is a point (35 minutes) at which I'll stop you if a given amount of time has passed for the test, just to keep everyone on a standard schedule.

Click the Start button when you are ready to begin.



#### **Useful Field of Vision (UFOV)**

The UFOV test assesses functional vision and visual attention. It consists of three subtests which assess speed of visual processing under increasingly complex task demands.

Subtest 1 measures central vision and processing speed. Participants identify which of two types of vehicles appears in a centrally located box. The picture's exposure time adapts in order to identify the point where participants can no longer reliably make correct identifications. The following sequence of figures illustrates the subtest 1 test items.

Subtest 2 measures divided attention. Participants again identify which of two types of vehicles appear. In addition, they indicate the location on the screen of a simultaneously presented second vehicle. Again, the exposure time varies to detect a participant's failure point. The following sequence of figures illustrates the subtest 2 test items.

Subtest 3 measures selective attention. Participants perform a task similar to subtest 2. However, in this case the targets are embedded in a background of distracting figures. The following sequence of figures illustrates the subtest 2 test items.

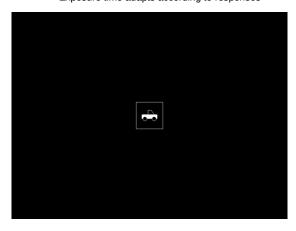
#### **UFOV** Instructions:

[script] This next test is a series of rapidly presented targets. In the first part you will try to identify whether a picture inside of a box in the center of the screen is a car or a truck. In the second and third parts you will do this as well as identify the location of a second target outside the box. There will be 4 practice items for each part to help you understand what you are to do. After you answer each problem, the test will automatically forward to the next problem. This test will last about 10 - 15 minutes.

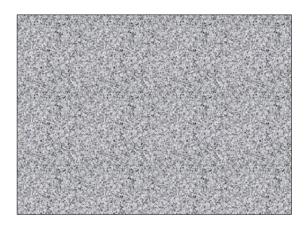
Click the Start button when you are ready to begin.

Subtest 1. Central Vision and Processing Speed

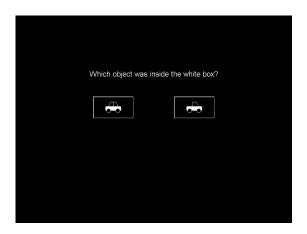
The target is presented briefly. Exposure time adapts according to responses



A gray panel appears

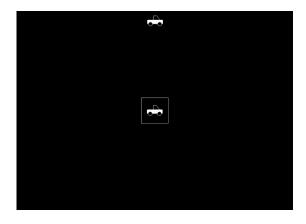


Examinees identify the target

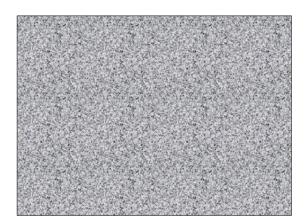


## Subtest 2. Divided Attention

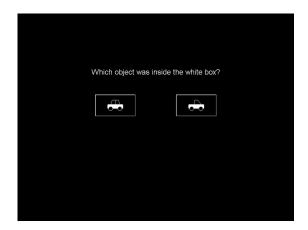
The target is presented briefly. Exposure time adapts according to responses



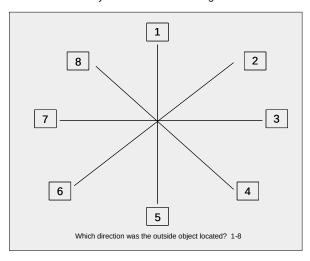
A gray panel appears



#### Examinees identify the target

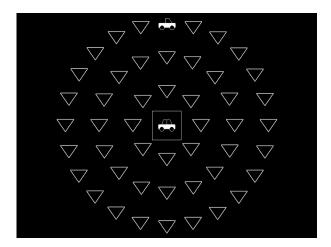


## Examinees identify the location of the target outside the box

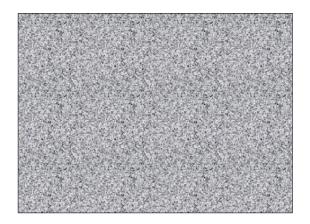


## Subtest 3. Selective Attention

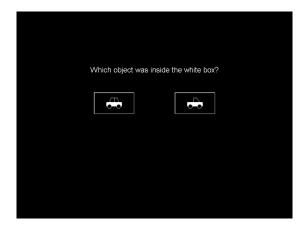
The target is presented briefly. Exposure time adapts according to responses



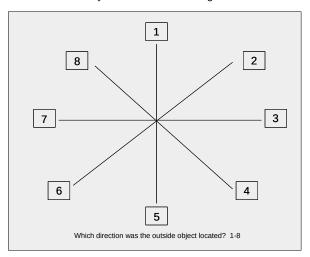
A gray panel appears



#### Examinees identify the target



#### Examinees identify the location of the target outside the box



#### Personality/Behavior

The final test consists of a series of questions asking participants about their past behavior and reactions to life events. These address a number of constructs shown in the literature to be related to commercial vehicle driving safety.

- <u>Energy Level</u>: The degree to which the individual is able to work long hours without getting tired. Low scorers experience greater physical and mental fatigue in long or demanding working conditions.
- <u>Anger</u>: The degree to which a driver becomes angry at other drivers and overtly expresses this anger. High scorers may curse at other drivers, use their vehicles to threaten or thwart other drivers, and engage in physical confrontations with other drivers. Low scorers are more likely to exhibit a higher degree of emotional control behind the wheel.
- <u>Attentional Focus</u>: The degree to which a driver blocks out distractions in order to maintain awareness of the environment outside of the car. Higher scorers are more likely to be observant of unusual events or changing conditions on the road, and therefore are more likely to anticipate and react to problems in time.
- <u>Macho</u>: The tendency to take unnecessary risks while driving and to compete with other
  drivers. High scorers are more likely to feel that they have 'something to prove' to other
  drivers and to engage in high-risk driving that shows off their skills or their car's capabilities.
- <u>Boredom Propensity</u>: The tendency to seek excitement and danger in order to avoid feelings of boredom. Low scores on this scale are comfortable working in very routine and repetitive environments, while high scorers find these situations too dull and are more likely to engage in thrill seeking behavior to keep amused.
- <u>Stress Tolerance</u>: The ability to maintain one's emotional composure during periods of stress, particularly when under time pressure to get to destinations on time. High scorers tend to be emotionally stable and to remain calm and composed in the face of unexpected delays on the road.
- <u>Dedication</u>: The degree to which a person strives for excellence and works hard towards task accomplishment. Those scoring low on this scale are more lackadaisical in their approach to work and require closer supervision to ensure task accomplishment.
- <u>Self-Efficacy</u>: The degree to which one feels successful about past undertakings and has a high expectancy of successfully coping with current and future demands and problems. Low scorers tend to be pessimistic about their abilities and are more likely to get discouraged by minor setbacks.
- <u>Driving Identification</u>: The degree to which one feels that commercial driving is a respectable and desirable career. High scorers have wanted to be commercial truck drivers for a long time and are proud to be in this profession.
- <u>Social Maturity</u>: A willingness to follow rules and policies. High scorers tend to be lawabiding and to avoid getting into trouble. Those with low scores tend to be rebellious and are more likely to have a history of violating rules and to be contemptuous of or ignore laws and company policies.
- Response Validity: This is a response distortion scale built into the test to measure the degree to which the test-taker is providing an overly-flattering self-description. This scale is designed to detect respondents' attempts to provide socially desirable, instead of personally descriptive, answers. This scale is used to statistically adjust the test results for such response distortion.

[Script] The final part of today's testing will be a questionnaire consisting of two parts. Again, your responses will be used for research purposes only and will be kept strictly confidential. Please be candid and honest when completing this questionnaire. There is no right or wrong answers. If you cannot decide on an answer or are uncomfortable about the question, you may leave it blank. The time needed to complete the questionnaire is not recorded. However, you should not spend too much time on any one item. When you feel that you understand the question, indicate your answer and go to the next question.

[Note to OMB and IRB: The items in the following questionnaire are organized and numbered by the type of construct they are measuring to aid review. The final questionnaire will be numbered sequentially and will not have the construct name in brackets. The on-line version will also have a place to type the answer.]

# Part 1. Below are questions and statements asking about your past behavior and reactions to life events. Type the letter that best describes your past experiences. Work at a fairly quick pace.

# [En

nergy Level		
1.	How often	have you found yourself wishing that you could take a nap during the day?
	a)	Very often
	b)	Often
	c)	Sometimes
	d)	Seldom
	e)	Never
2.	How often	have you found yourself dozing or nodding off during the day?
	a)	Very often
	b)	Often
	c)	Sometimes
	d)	Seldom
	e)	Never

- 3. How likely are you to be really tired by the end of the day? a) Very likely

  - b) Likely
  - c) Somewhat likely
  - d) Unlikely
  - e) Very unlikely
- 4. To what extent have you found that you have a lot more energy than others?
  - a) Great extent
  - b) Large extent
  - c) Moderate extent
  - d) Slight extent
  - e) Not at all
- 5. I seem to need less sleep than others.
  - a) Strongly agree
  - b) Agree
  - c) Neither agree nor disagree
  - d) Disagree
  - e) Strongly disagree
- 6. I bounce back faster than others after a few hours of sleep.
  - a) Strongly agree
  - b) Agree
  - c) Neither agree nor disagree
  - d) Disagree
  - e) Strongly disagree
- 7. A job with long hours is a good fit for me.
  - a) Strongly agree
  - b) Agree
  - c) Neither agree nor disagree
  - d) Disagree
  - e) Strongly disagree

8. To what extent have you tended to get sleepy when things got slow or repetitive? a) Great extent b) Large extent c) Moderate extent d) Slight extent e) Not at all 9. When on vacation I prefer strenuous activities rather than taking it easy. a) Strongly agree b) Agree c) Neither agree nor disagree d) Disagree e) Strongly disagree 10. When you have worked long hours in a day, how often do you wake up tired the next day? a) Very often b) Often c) Sometimes d) Seldom e) Never 11. To what extent have you taken rest breaks when you started to get tired behind the wheel? a) Great extent b) Large extent c) Moderate extent d) Slight extent e) Not at all [Driver Anger/Hostility (towards other drivers)] 1. To what extent has it made you angry when another driver tailgated you or cut in front of you? a) Great extent b) Large extent c) Moderate extent d) Slight extent e) Not at all 2. How likely have you been to curse or yell at selfish drivers? a) Very likely b) Likely c) Somewhat likely d) Unlikely e) Very unlikely 3. How often have you blocked another driver who wanted to merge into your lane? a) Very often b) Often c) Sometimes d) Seldom e) Never

4.	a) b)	have you become angry at slow drivers who refused to get out of your way? Very often Often
	,	Sometimes
	,	Seldom Never
5.	,	have you increased your speed to avoid being passed by another driver?
		Very often
	,	Often
	,	Sometimes
	,	Seldom Never
6.	,	have you been to retaliate against a driver who was being rude?
		Very likely
	b)	Likely
	c)	Somewhat likely
	d)	Unlikely
	e)	Very unlikely
7.		ers deliberately provoke you, how often do you ignore it and drive away?
		Very often
	,	Often Sometimes
	,	Seldom
	,	Never
8.	,	ot to make me really angry at another driver.
		Strongly agree
	b)	Agree
		Neither agree nor disagree
	,	Disagree
_		Strongly disagree
9.		ers push me to my limits.
		Strongly agree
		Agree Neither agree nor disagree
		Disagree
		Strongly disagree
10.		ers need to be taught a lesson.
		Strongly agree
	b)	Agree
		Neither agree nor disagree
		Disagree
		Strongly disagree
11.		n close to getting in a fight over something that happened on the road.
		Strongly agree Agree
	,	Neither agree nor disagree
		Disagree
		Strongly disagree
	,	

	How often have you confronted drivers who were aggressive with you or with other drivers?  a) Very often b) Often c) Sometimes d) Seldom e) Never
[Attent	nal Focus/Distractibility]
1.	When driving, how often have you had to react quickly to avoid an accident when adjusting the radio or operating a cell phone?  a) Very often b) Often c) Sometimes d) Seldom e) Never
2.	When driving, how likely have you been to do things (e.g., eating, dialing on a cell) inside the vehicle hat required your attention?  a) Very likely
	b) Likely
	c) Somewhat likely
	d) Unlikely
3.	e) Very unlikely When driving, how often were you a little distracted from the road when you were upset or preoccupied with something?  a) Very often b) Often
	c) Sometimes d) Seldom e) Never
4.	How often do you think about daily problems and tasks to deal with when you are driving?  a) Very often b) Often c) Sometimes d) Seldom e) Never
5.	When driving, to what extent do you slow down when you are upset about something?  a) Great extent b) Large extent c) Moderate extent d) Slight extent e) Not at all
6.	To what extent have you felt restless when you have to sit for a long time?  a) Great extent b) Large extent c) Moderate extent d) Slight extent e) Not at all

7. How often does your mind wander a bit when you are driving? a) Very often b) Often c) Sometimes d) Seldom e) Never 8. To what extent have you found it difficult to concentrate for long periods of time? a) Great extent b) Large extent c) Moderate extent d) Slight extent e) Not at all 9. To what extent have you been able to avoid accidents by seeing situations develop down the road? a) Great extent b) Large extent c) Moderate extent d) Slight extent e) Not at all 10. Compared to others, I am more watchful for drivers who may be drunk or sleepy. a) Strongly agree b) Agree c) Neither agree nor disagree d) Disagree e) Strongly disagree 11. I have done things on impulse that I later regret. a) Strongly agree b) Agree c) Neither agree nor disagree d) Disagree e) Strongly disagree 12. Sometimes I act before thinking everything through. a) Strongly agree b) Agree c) Neither agree nor disagree d) Disagree e) Strongly disagree [Macho (and Risk-Taking)/Overconfidence] 1. I can get a little competitive with other drivers when I'm in the mood. a) Strongly agree b) Agree c) Neither agree nor disagree d) Disagree e) Strongly disagree 2. To what extent have you found that you could drive pretty fast because of your strong driving skills? a) Great extent b) Large extent c) Moderate extent d) Slight extent e) Not at all

3.	How often have you enjoyed doing risky things to test your capabilities?  a) Very often b) Often c) Sometimes
	d) Seldom
4.	e) Never To what extent has it been thrilling to put yourself in dangerous situations?
	<ul> <li>a) Great extent</li> <li>b) Large extent</li> <li>c) Moderate extent</li> <li>d) Slight extent</li> <li>e) Not at all</li> </ul>
5.	How often have you enjoyed racing other drivers at stop lights to see who was fastest?  a) Very often b) Often c) Sometimes d) Seldom e) Never
6.	How likely have you been to speed up and pass other drivers after they passed you?  a) Very likely
	b) Likely
	c) Somewhat likely
	d) Unlikely
7.	e) Very unlikely It's a real rush to drive fast on an open road. a) Strongly agree b) Agree c) Neither agree nor disagree d) Disagree
	e) Strongly disagree
8.	I demand that people respect my rights on the road.  a) Strongly agree b) Agree c) Neither agree nor disagree d) Disagree
9.	<ul><li>e) Strongly disagree</li><li>How likely have you been to change how you drive when the weather was bad?</li><li>a) Very likely</li></ul>
	b) Likely
	c) Somewhat likely
	d) Unlikely
10.	e) Very unlikely  To what extent do you drive differently when you know the police are in the area?  a) Great extent b) Large extent c) Moderate extent d) Slight extent e) Not at all

#### [Boredom Propensity]

- 1. To what extent have you found it boring to have the same routine, day after day?
  - a) Great extent
  - b) Large extent
  - c) Moderate extent
  - d) Slight extent
  - e) Not at all
- 2. To what extent have you preferred to be in new situations where a lot of activity is going on?
  - a) Great extent
  - b) Large extent
  - c) Moderate extent
  - d) Slight extent
  - e) Not at all
- 3. I would prefer visiting a busy city rather than a quiet area.
  - a) Strongly agree
  - b) Agree
  - c) Neither agree nor disagree
  - d) Disagree
  - e) Strongly disagree
- 4. To what extent have your preferred to be around people who are very unpredictable?
  - a) Great extent
  - b) Large extent
  - c) Moderate extent
  - d) Slight extent
  - e) Not at all
- 5. To what extent have you seen yourself as a person of action who enjoys living in the 'here and now'?
  - a) Great extent
  - b) Large extent
  - c) Moderate extent
  - d) Slight extent
  - e) Not at all
- 6. To what extent have you done things that are a little scary just for the thrill of it?
  - a) Great extent
  - b) Large extent
  - c) Moderate extent
  - d) Slight extent
  - e) Not at all
- 7. To what extent have you gotten bored when driving a long time on a familiar road?
  - a) Great extent
  - b) Large extent
  - c) Moderate extent
  - d) Slight extent
  - e) Not at all
- 8. To what extent do you like to be in new situations where you don't know what is going to happen next?
  - a) Great extent
  - b) Large extent
  - c) Moderate extent
  - d) Slight extent
  - e) Not at all

#### [Time Pressure aspect of Stress Tolerance/Planning to reduce time pressure]

- There never seems to be enough time in the day to get everything done.
   a) Strongly agree
  - b) Agree
  - c) Neither agree nor disagree
  - d) Disagree
  - e) Strongly disagree
- 2. To what extent do you always seem to be rushing from one thing to another during the day?
  - a) Great extent
  - b) Large extent
  - c) Moderate extent
  - d) Slight extent
  - e) Not at all
- 3. How often have you had to drive faster than normal so that you wouldn't be late?
  - a) Very often
  - b) Often
  - c) Sometimes
  - d) Seldom
  - e) Never
- 4. An unexpected traffic jam can really ruin my day.
  - a) Strongly agree
  - b) Agree
  - c) Neither agree nor disagree
  - d) Disagree
  - e) Strongly disagree
- 5. To what extent have you been forced to make up for lost time on the road when you needed to?
  - a) Great extent
  - b) Large extent
  - c) Moderate extent
  - d) Slight extent
  - e) Not at all
- 6. How often have you spent time planning your trip on the road so that you could get to your destination efficiently?
  - a) Very often
  - b) Often
  - c) Sometimes
  - d) Seldom
  - e) Never
- 7. To what extent are you usually a big hurry to get things done?
  - a) Great extent
  - b) Large extent
  - c) Moderate extent
  - d) Slight extent
  - e) Not at all
- 8. Before beginning a trip, I usually spend a lot of time planning to help prepare for unexpected delays.
  - a) Strongly agree
  - b) Agree
  - c) Neither agree nor disagree
  - d) Disagree
  - e) Strongly disagree

9. Some drivers don't seem to understand that some people are in a rush.	
a) Strongly agree	
b) Agree	
c) Neither agree nor disagree	
d) Disagree	
e) Strongly disagree 10. I feel financially pressured to push myself to do more than others.	
a) Strongly agree	
b) Agree	
c) Neither agree nor disagree	
d) Disagree	
e) Strongly disagree	
11. To what extent have you felt that your life so far has been mostly a failure?	
a) Great extent	
b) Large extent	
c) Moderate extent	
d) Slight extent	
e) Not at all	
12. How often have you wondered why you have had so many bad breaks in life?	
a) Very often	
b) Often	
c) Sometimes	
d) Seldom	
e) Never	
13. How often have you lost sleep because you had something important on your mind?	
a) Very often	
b) Often	
c) Sometimes	
d) Seldom	
e) Never	
14. To what extent have you felt the effects of the pressures and stresses of everyday life?	
a) Great extent	
<ul><li>b) Large extent</li><li>c) Moderate extent</li></ul>	
d) Slight extent	
e) Not at all	
2)	
[Dedication/Conscientiousness/Work Orientation]	
1. I feel bad if I don't push myself hard every day.	
a) Strongly agree	

b) Agree

d) Disagree

e) Strongly disagree

c) Neither agree nor disagree

2. I like to keep going until the job is completed.
a) Strongly agree
b) Agree
c) Neither agree nor disagree
d) Disagree
e) Strongly disagree
3. How often have you done some extra maintenance on your commercial vehicle so that everything is
exactly right?
a) Very often
b) Often
c) Sometimes
d) Seldom
e) Never
4. I like the challenge of trying to be the best at work.
a) Strongly agree
b) Agree
c) Neither agree nor disagree
d) Disagree
e) Strongly disagree
5. I hate to waste time when I am on the road.
a) Strongly agree
b) Agree
c) Neither agree nor disagree
d) Disagree
e) Strongly disagree
6. When taking your commercial vehicle into the repair shop, how often were you told that it had been overdue for maintenance?
a) Very often b) Often
c) Sometimes
d) Seldom
e) Never
7. When your commercial vehicle broke down, how often was it because you decided to skip some
maintenance that would have found the problem?
a) Very often
b) Often
c) Sometimes
d) Seldom
e) Never
8. It is a little unrealistic to expect people to exactly follow the recommended maintenance schedule for
their commercial vehicles.
a) Strongly agree
b) Agree
c) Neither agree nor disagree
d) Disagree
e) Strongly disagree
9. How often have you found it best to avoid projects that are too hard to handle?
a) Very often
b) Often
c) Sometimes
d) Seldom

e) Never

- 10. How did you typically deal with homework assignments in high school?
  - a) I consistently gave my best effort
  - b) I worked fairly hard on most assignments
  - c) I worked hard on some assignments but not on others
  - d) I did the minimum to get by on most assignments
  - e) I mostly ignored the assignments
- 11. I pay close attention to the little things when I'm working on something.
  - a) Strongly agree
  - b) Agree
  - c) Neither agree nor disagree
  - d) Disagree
  - e) Strongly disagree
- 12. Working hard gives me a sense of purpose.
  - a) Strongly agree
  - b) Agree
  - c) Neither agree nor disagree
  - d) Disagree
  - e) Strongly disagree
- 13. To what extent have you felt that it was worth it to do the job exactly the right way?
  - a) Great extent
  - b) Large extent
  - c) Moderate extent
  - d) Slight extent
  - e) Not at all

# [Self-Efficacy/Internal Locus of Control]

- 1. I am as good of a commercial truck driver as anybody else.
  - a) Strongly agree
  - b) Agree
  - c) Neither agree nor disagree
  - d) Disagree
  - e) Strongly disagree
- 2. At an early age, I knew I had what it takes to be a good truck driver.
  - a) Strongly agree
  - b) Agree
  - c) Neither agree nor disagree
  - d) Disagree
  - e) Strongly disagree
- 3. I feel fortunate that my driving skills seem to be a little better than the average driver.
  - a) Strongly agree
  - b) Agree
  - c) Neither agree nor disagree
  - d) Disagree
  - e) Strongly disagree
- 4. How confident are you that you can achieve the goals you have set for yourself?
  - a) Extremely confident
  - b) Very confident
  - c) Somewhat confident
  - d) Slightly confident
  - e) Not at all confident

- 5. How confident are you about your work ability?
  - a) Extremely confident
  - b) Very confident
  - c) Somewhat confident
  - d) Slightly confident
  - e) Not at all confident
- 6. How confident are you that you will reach your career goals in commercial driving?
  - a) Extremely confident
  - b) Very confident
  - c) Somewhat confident
  - d) Slightly confident
  - e) Not at all confident
- 7. How confident are you that you can handle most problems that come your way?
  - a) Extremely confident
  - b) Very confident
  - c) Somewhat confident
  - d) Slightly confident
  - e) Not at all confident

### [Driving Identification/Congruence with Career]

- 1. I enjoy all aspects of commercial driving.
  - a) Strongly agree
  - b) Agree
  - c) Neither agree nor disagree
  - d) Disagree
  - e) Strongly disagree
- 2. Commercial driving allows me to meet many of my goals.
  - a) Strongly agree
  - b) Agree
  - c) Neither agree nor disagree
  - d) Disagree
  - e) Strongly disagree
- 3. Too many car drivers don't show the proper respect to truckers on the road.
  - a) Strongly agree
  - b) Agree
  - c) Neither agree nor disagree
  - d) Disagree
  - e) Strongly disagree
- 4. Those around me appreciate my driving skills.
  - a) Strongly agree
  - b) Agree
  - c) Neither agree nor disagree
  - d) Disagree
  - e) Strongly disagree
- 5. Commercial truck drivers are respected in the U.S.
  - a) Strongly agree
  - b) Agree
  - c) Neither agree nor disagree
  - d) Disagree
  - e) Strongly disagree

### [Social Maturity/Dependability/Part 2 also measures social maturity]

- 1. People should be free to behave mostly according to their own rules.
  - a) Strongly agree
  - b) Agree
  - c) Neither agree nor disagree
  - d) Disagree
  - e) Strongly disagree
- 2. In school, how often did you break the rules?
  - a) Very often
  - b) Often
  - c) Sometimes
  - d) Seldom
  - e) Never
- 3. To what extent have you found it sometimes necessary to bend the rules to get

things done?

- a) Great extent
- b) Large extent
- c) Moderate extent
- d) Slight extent
- e) Not at all

### [Response Validity Scale/Faking Adjustment]

- 1. How often have you had unkind thoughts about someone?
  - a) Very often
  - b) Often
  - c) Sometimes
  - d) Seldom
  - e) Never
- 2. How often have you been in an irritable mood?
  - a) Very often
  - b) Often
  - c) Sometimes
  - d) Seldom
  - e) Never
- 3. How often have you put off doing a chore that you could have taken care of right away?
  - a) Very often
  - b) Often
  - c) Sometimes
  - d) Seldom
  - e) Never
- 4. How often have you felt like swearing?

- a) Very often
- b) Often
- c) Sometimes
- d) Seldom
- e) Never
- 5. Have you ever wasted time by working inefficiently?
  - a) Very often
  - b) Often
  - c) Sometimes
  - d) Seldom
  - e) Never
- 6. Have you always told the entire truth to others?
  - a) Very often
  - b) Often
  - c) Sometimes
  - d) Seldom
  - e) Never
- 7. How often have you been a little jealous of others?
  - a) Very often
  - b) Often
  - c) Sometimes
  - d) Seldom
  - e) Never
- 8. How often have you been impolite in any way to others?
  - a) Very often
  - b) Often
  - c) Sometimes
  - d) Seldom
  - e) Never

Part 2: In this section, you will be presented with groups of four statements. Within each group, indicate the statement that is **MOST** like you by writing an '**M**' next to it. Next, indicate which of the remaining three statements is **LEAST** like you by writing an '**L**' next to this statement. Leave the other two statements blank.

Here is a sample item that has been correctly completed:

Suppose that choice **d** (I love to ride on roller coasters) is **most** like you, and **b** (I have played pranks on people) is **least** like you. You should mark your item as follows:

Sample Item:	
a. I believe in the power of fortune tellers.	
_L_ b. I have played pranks on people.	
c. I have often stayed up late to finish a project.	
<u>M</u> d. I love to ride on roller coasters.	

For some items, it may be hard to make these choices. Just do your best but don't spend a lot of time on any single item.

1.	a. My friends look to me when decisions have to be made.
	b. I only work hard if I like what I am doing.
	c. I sometimes lied in order to get what I wanted.
	d. I have felt calm when alone in new places.
2.	a. I have let my problems get the best of me.
	b. I usually let others take the lead.
	c. I've been respectful to my teachers and superiors.
	d. I believe that hard work has been the biggest reason for my success.
3.	a. I have sometimes made up stories to avoid getting into trouble.
	b. I get more enjoyment from leisure activities than work.
	c. I usually plan things well ahead of time.
	d. I rarely criticize others when they start criticizing me.
4.	a. I have often stayed up late to finish a project.
	b. It's usually OK to bend the law if you don't actually break it.
	c. When I want to I can put worries out of my mind.
	d. I often get upset when someone points out my mistakes.
5.	a. I usually work hard on a task or assignment.
	b. I have often felt that life would be better if there weren't so many rules.
	c. I rarely take the time to organize my work and living areas.
	d. I have never wished that something bad will happen to someone who
	made me mad.

6.	a. I occasionally fall short of expectations at work.
	b. I have done things just because they were against the rules.
	c. I feel comfortable when alone in new places.
	d. I usually make the decisions when I am with friends.
7.	a. I feel comfortable telling others what to do.
	b. If somebody hits me, I hit back.
	c. I obey rules even if they get in the way of what I want to do.
	d. I don't try my hardest unless I like what I am doing.
8.	a. I feel at ease when away from my family and friends.
	b. I have often 'taken charge' when working in groups.
	c. I have often been angered by how my teachers or bosses treated me.
	d. I have never let anyone down.
9.	a. I can often persuade others to do things my way.
	b. I stayed out of trouble in high school.
	c. I've made a good first impression on most people.
	d. It's usually OK to bend the law if you don't actually break it.
10.	a. When a new task comes along I usually start working on it right away.
	b. I have sometimes felt sick to my stomach for no reason.
	c. When I get mad, I often feel like hitting someone.
	d. I obey rules even when they interfere with what I want to do.