

Exploring the relationships between percent highly annoyed and residents' judgments about the airport

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Outline

- **Background - ACRP 02-35 Study**
 - Source of the data used here
 - Google: **ACRP web-only 17**
 - Study Purposes and Conclusions
- **Used Telephone Interview Data from Study**
 - Examine 4 Specific Questions
- **Results**
- **Discussion**

Background - ACRP Study 02-35 - Goals

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- **Research Methods for Understanding Aircraft Noise Annoyances and Sleep Disturbance**
 - Test of methodology for later national annoyance survey
 - Conducted mail and telephone interviews at three large airports
 - Brief mail survey (10 questions)
 - Telephone interview (about 20 minutes, 49 questions)
 - Primary Goal – Determine whether annoyance response of mail and telephone surveys significantly different
 - Secondary Goal – Determine response rates for the two modes

Background - ACRP Study 02-35 - Results

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- **Comparability of Telephone and Mail Results**
 - Statistical tests showed no significant difference overall between the mail and telephone surveys in percent highly annoyed.
- **Response Rates**
 - Response rates for the mail survey are much higher than those for the telephone survey (35.1% vs. 12.1%).
- **National Survey to Rely on Mail Survey**

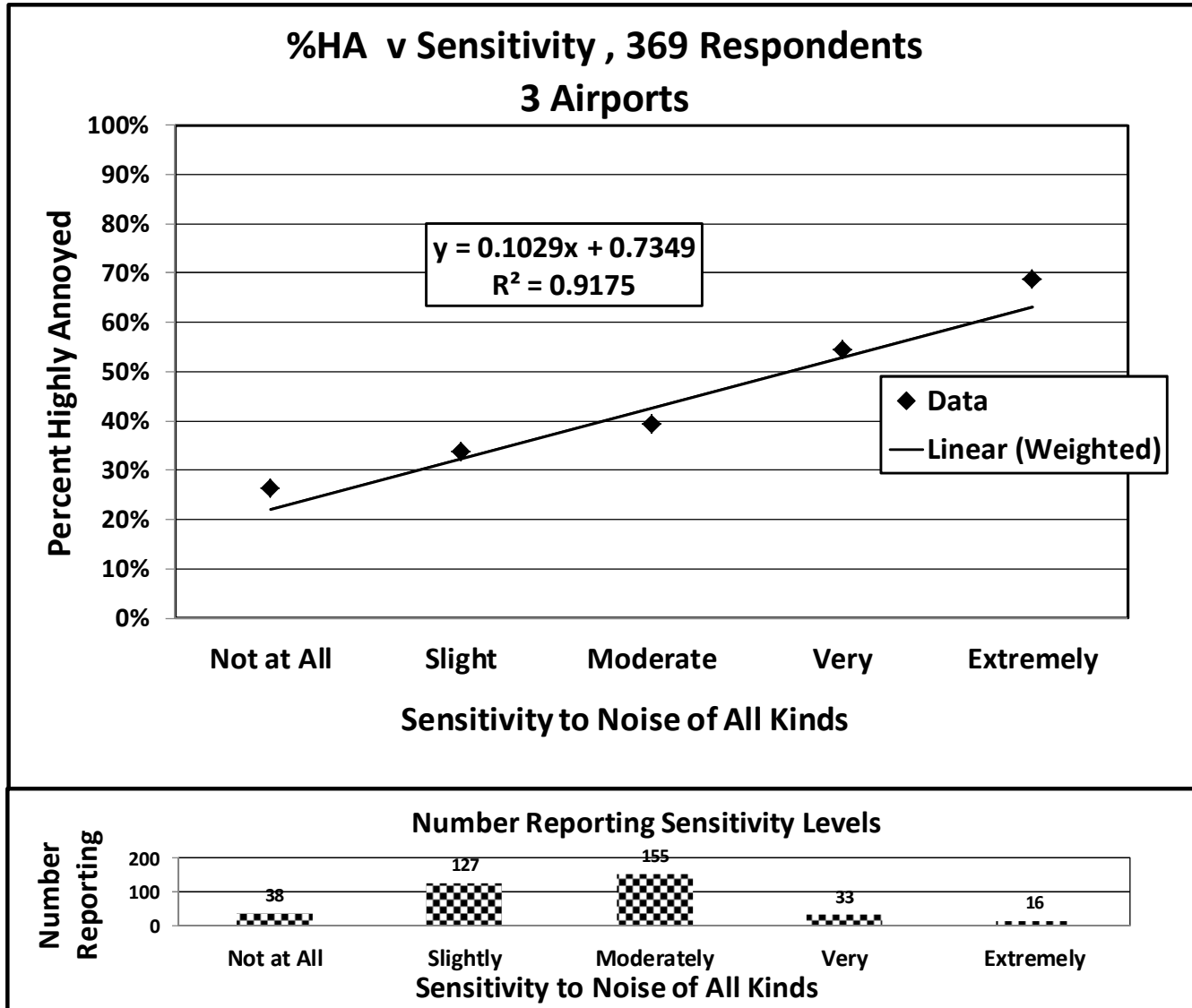
An Opportunity for Some Additional Exploration

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- **Telephone Responses**
 - Approximately 100 completed interviews per airport
 - Determined Estimates of Relation Between Personal Variables and Annoyance Responses
 - Sensitivity to noise
 - Importance of airport
 - Trust in airport officials to work fairly with the community
 - Airport's understanding of residents' feelings about noise

- **Question:**
 - “How sensitive are you generally to noise of all kinds: extremely sensitive, very sensitive, moderately sensitive, slightly sensitive, or not at all sensitive?”

Sensitivity to Noise



Sensitivity to Noise

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Noise Sensitivity: Regression Results				
	Slope	Intercept	R²	n
3 Airports	0.1029	0.7349	0.9175	369
Airport 1	0.0602	0.7161	0.4984	112
Airport 2	0.1197	0.7535	0.8499	143
Airport 3	0.1549	0.8362	0.9834	114

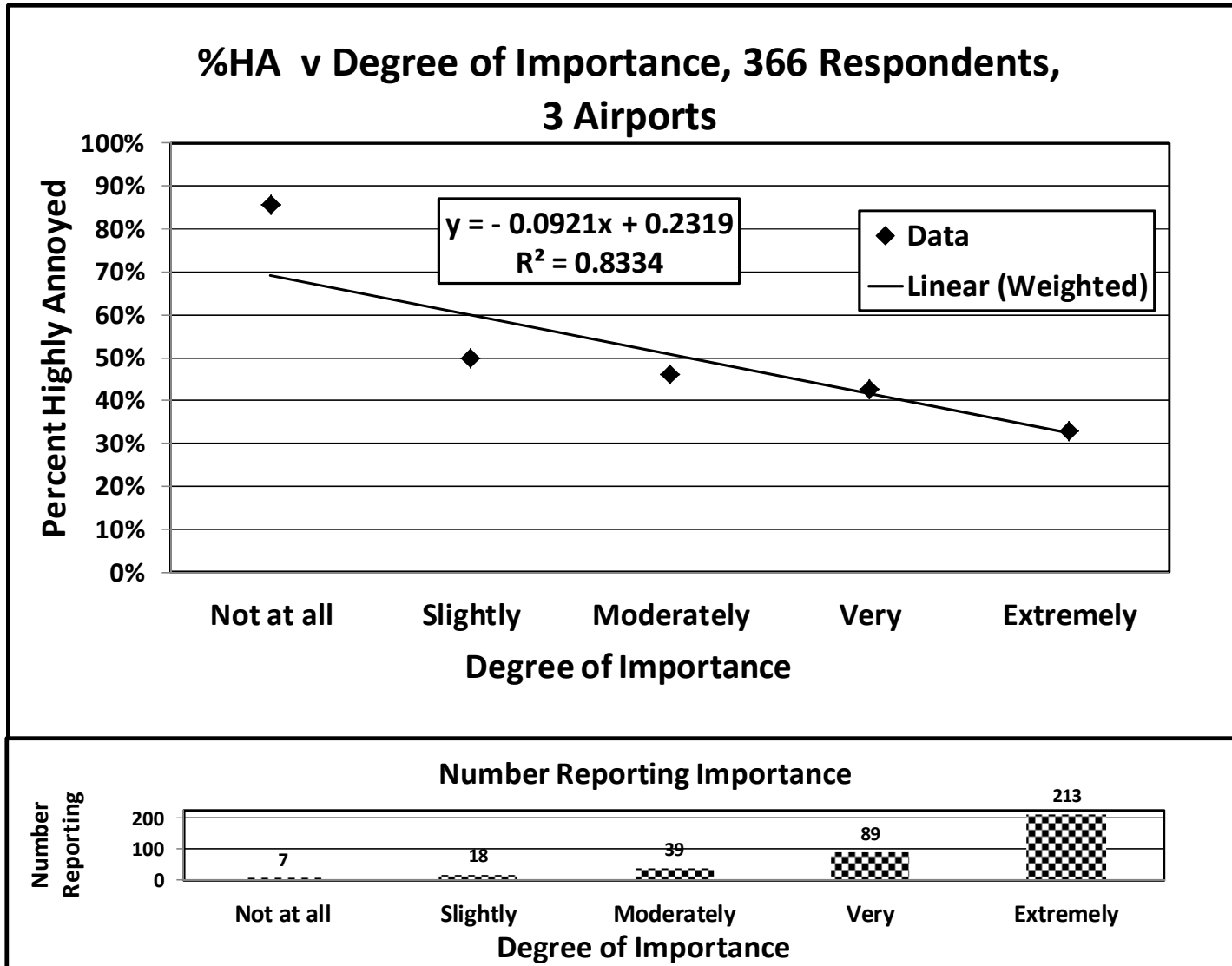
Judged Importance of Airport

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- **Question:**
 - “How important do you think that [LOCAL AIRPORT] is for the [CITY NAME] area: Is [LOCAL AIRPORT] extremely important, very important, moderately important, slightly important or not at all important?”

Judged Importance of Airport

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Judged Importance of Airport

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Importance of Airport: Regression Results				
	Slope	Intercept	R²	n
3 Airports	-0.0921	0.2319	0.8334	366
Airport 1	-0.1059	0.2495	0.8112	111
Airport 2	0.0141	0.3683	0.1853	142
Airport 3	-0.1409	0.1610	0.9066	113

Trust Airport Officials to Work Fairly

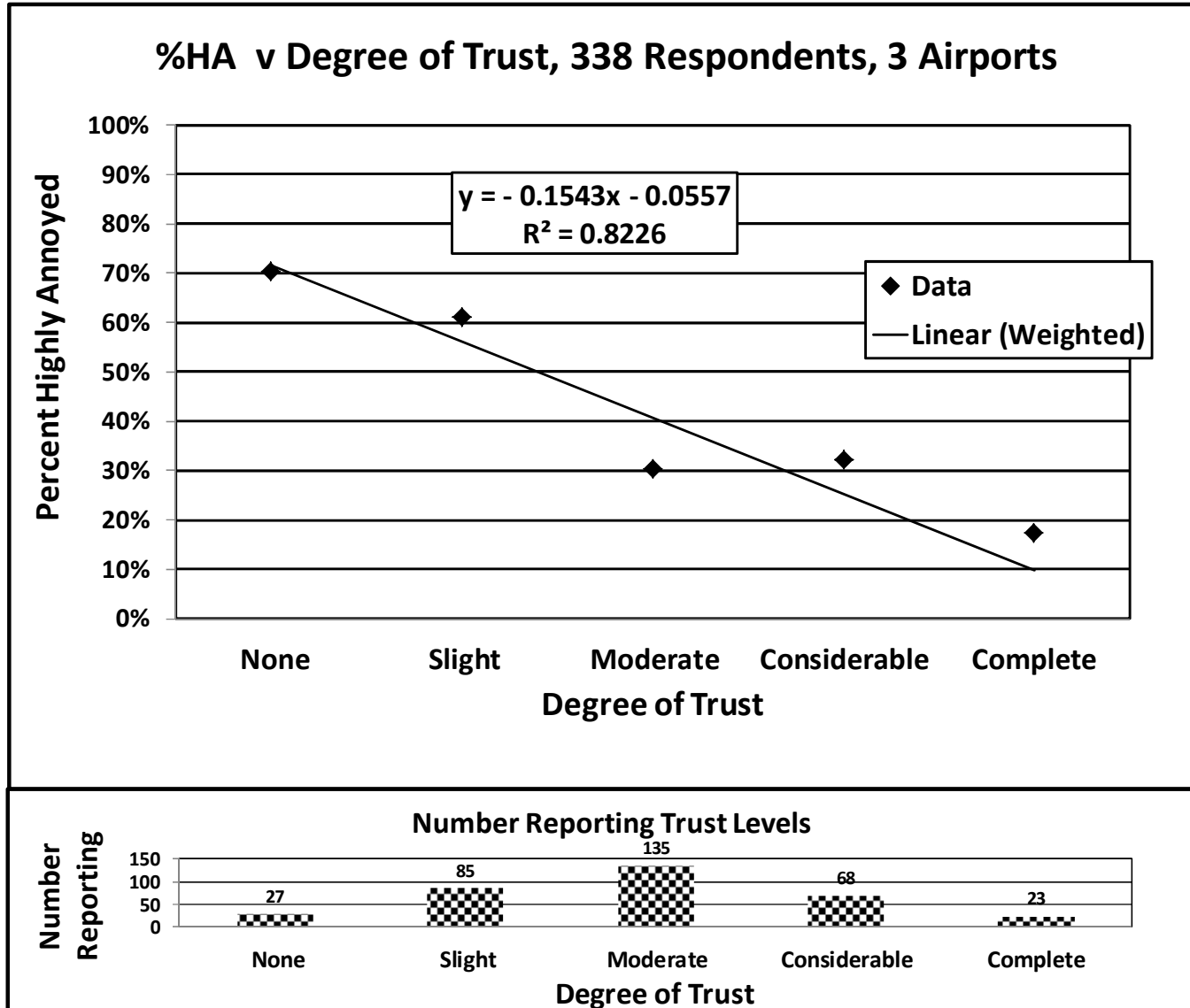
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- **Question:**

- “To what extent do you think that [LOCAL AIRPORT] officials can be trusted to fairly work with the community by following official, agreed-upon procedures and providing accurate information? Do you think the officials can be completely trusted, considerably trusted, moderately trusted, slightly trusted or not at all trusted?”

Trust Airport Officials to Work Fairly

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Trust Airport Officials to Work Fairly

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Trust in Airport Officials: Regression Results				
	Slope	Intercept	R²	n
3 Airports	-0.1543	-0.0557	0.8226	338
Airport 1	-0.2283	-0.267	0.9367	107
Airport 2	-0.0832	0.1438	0.3429	127
Airport 3	-0.1290	0.0057	0.6656	104

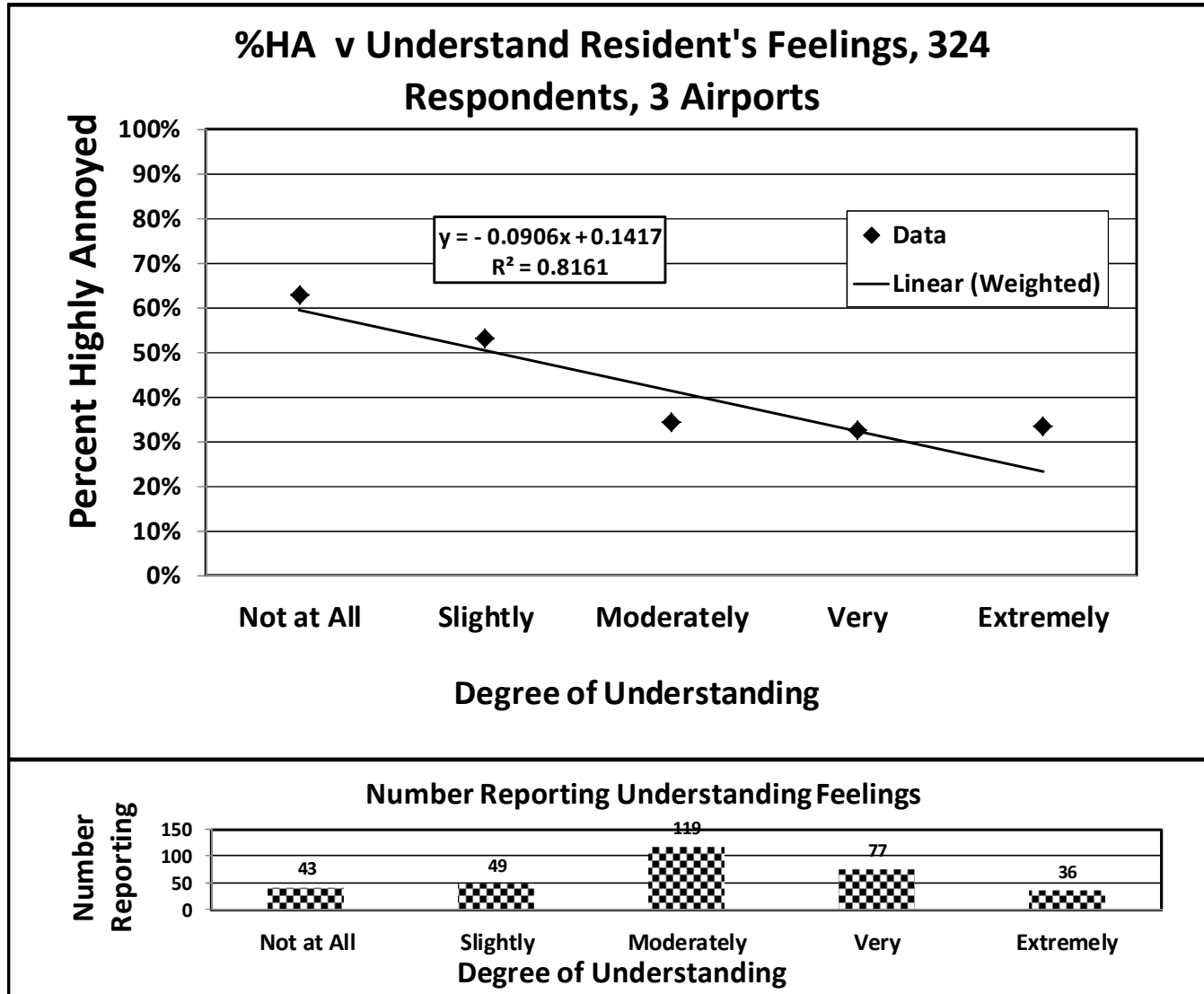
Airport's Understanding of Residents' Feelings about Noise

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- **Question:**
 - “How well do you think [LOCAL AIRPORT] officials understand the community residents’ feelings about aircraft noise? Do you think the officials understand the residents’ feelings extremely well, very well, moderately well, slightly, or not at all?”

Airport's Understanding of Residents' Feelings about Noise

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Airport's Understanding of Residents' Feelings about Noise

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Understanding: Regression Results				
	Slope	Intercept	R²	n
3 Airports	-0.0906	0.1417	0.8161	324
Airport 1	-0.0890	0.2336	0.6649	106
Airport 2	-0.0834	0.1553	0.4112	118
Airport 3	-0.1059	0.1621	0.7234	100

- **What do the results mean?**
 - Correlation does not mean cause and effect
 - Influences could go in other direction
 - No control for noise exposure
 - Are results partly due to individual personalities?
- **However...**

- **ACRP study preparatory for 20 airport national survey**
 - Will use the same instruments
 - Will include full statistical analyses
 - Control for noise exposure
- **May begin to identify personal and airport variables affecting annoyance in addition to noise exposure**

