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# Personality traits, perceived autonomy support and therapeutic adherence among hypertensive patients

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## Methods

To date (datas collection continues), 27 hypertensive patients (50% male/female - 55.23 y.o. [17.07]) completed :

- ✓ The Health Care Climate Questionnaire (Williams et al., 1996),
- ✓ The Big Five Inventory (John et al. 1991),
- ✓ The Therapeutic Reactance Scale (Dowd et al., 1991),
- ✓ and the Generic Adherence Scale (Tarquinio & Muller, 2013).

## OBJECTIVES

The aim of this study is to explore relationship between health care climate (specifically, perceived autonomy support), hypertensive patient personality traits, psychological reactance (specifically, therapeutic reactance) and the therapeutic adherence.

## Results

The first result to note is that factors influencing adherence differ depending on the target behavior. For example, the most surprising result concerns the role of extraversion in the observance behaviours. It is positively and strongly related to medication adherence but strongly and negatively associated with adherence to diet. Similarly, neuroticism and openness show no effect on drug adherence, but appear to be strongly involved in adherence to diet. In contrast, agreeableness and conscientiousness are only involved in drug compliance.

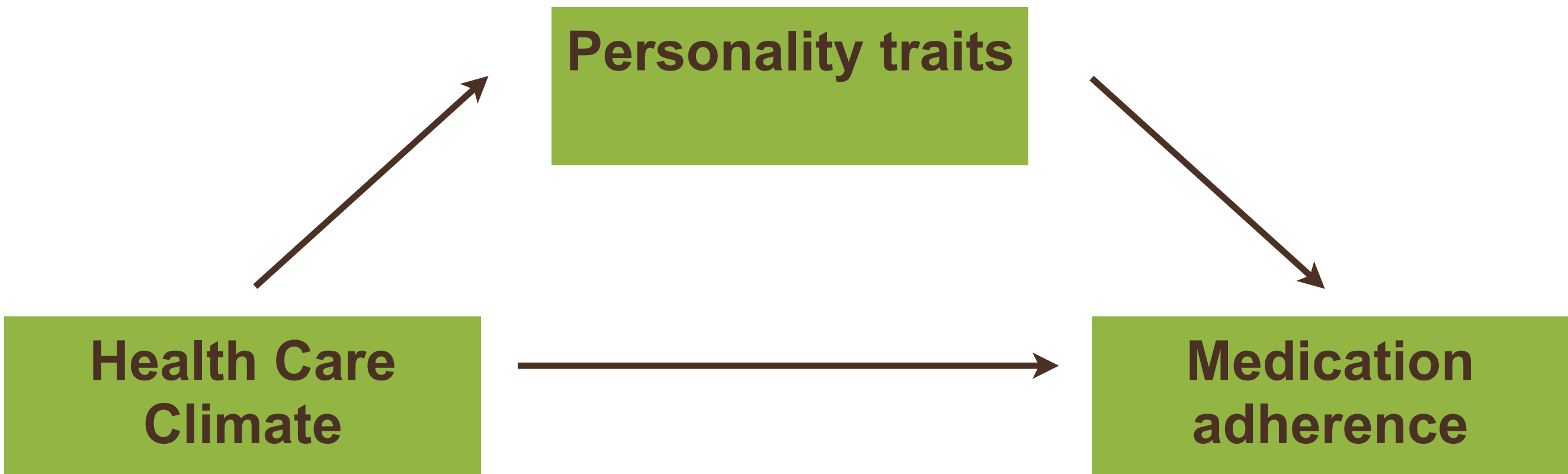
On climate health, it seems to be a relevant variable in the case of drug compliance. And even in this case, its impact is greatly weakened when personality traits are taken into account. Given that the climate of health is correlated with personality traits (not shown here), the results of the stepwise regression show a partial mediating effect on the climate features of health / adherence relationship.

Finally, only the verbal reactance seems to be important in adherence: less people are reactant and more they are compliant

Table 1 : Stepwise multivariate linear regression of medication adherence and dietary adherence

Variables	Medication adherence				Dietary adherence			
	R <sup>2</sup>	R <sup>2</sup>	ΔR <sup>2</sup>	β	R <sup>2</sup>	R <sup>2</sup>	ΔR <sup>2</sup>	β
<b>Step 1 : demographic variables</b>	0,06	-0,02	F(2,24)	-	0,03	-0,05	F(2,24)	-
Age				0,23				0,17
Gender				0,12				0,02
<b>Step 2 : Step 1 + medical variables</b>	0,09	-0,03	F(3,23)	0,03	0,05	-0,08	F(3,23)	0,02
Age				<b>0,33</b>				0,09
Gender				0,20				-0,05
Others medications				0,21				-0,17
<b>Step 3 : Step 2 + Health climate</b>	0,37	0,26	F(4,22)	0,28**	0,05	-0,13	F(4,22)	0,00
Age				0,30				0,09
Gender				0,09				-0,04
Others medications				0,18				-0,17
Health Climate				<b>0,54**</b>				0,00
<b>Step 4 : Step 3 + Personality traits</b>	0,51	0,25	F(9,17)	0,14	0,39	0,07	F(9,17)	0,34
Age				0,34				<b>0,28</b>
Gender				<b>0,62**</b>				-0,05
Others medications				0,25				-0,10
Health Climate				<b>0,23</b>				0,06
Neuroticism				0,07				<b>-0,47*</b>
Extraversion				0,36				<b>-0,43</b>
Openness				-0,18				<b>0,29</b>
Agreeableness				<b>0,55**</b>				0,05
Conscientiousness				-0,11				0,10
<b>Step 5 : Step 4 + Reactance</b>	,55**	0,21	F(11,15)	0,04	0,44	0,04	F(11,15)	0,05
Age				<b>0,44</b>				<b>0,40</b>
Gender				<b>0,68**</b>				0,02
Others medications				<b>0,29</b>				-0,05
Health Climate				<b>0,20</b>				0,02
Neuroticism				0,02				<b>-0,52**</b>
Extraversion				<b>0,39</b>				<b>-0,40</b>
Openness				-0,08				<b>0,41</b>
Agreeableness				<b>0,55**</b>				0,04
Conscientiousness				<b>-0,21</b>				0,01
Verbal reactance				<b>-0,28</b>				<b>-0,29</b>
Behavioral reactance				0,02				-0,03

Figure 1 : Partial mediation model - When personality traits mediate the impact of health care climate on medication adherence



## Conclusion

This study allows to conclude that adherence is a complex process which is associated with medical condition and medication, with physician-patient relationship, with patients' characteristics, and with the nature of target behaviour. The health care climate is important to consider, but patients' personality traits must be taken into account to understand the best way to interact with patients to reduce psychological reactance and promote self-regulation of health behaviours.

These results are preliminary results and data collection should continue.

Furthermore, it is possible that this study did not allow to identify the proper role of psychological reactance on adherence given the fact that reactant people are those : who likely stop making appointments, who are less likely to participate in such research. Reflection should be conducted to better understand the impact of psychological reactance in medical care.

Finally, adherence to physical activity practice and to smoking cessation should also be studied.

## References

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