

PHIT2LEARN

Feasibility and acceptability of “sit to stand desks” in the VET setting

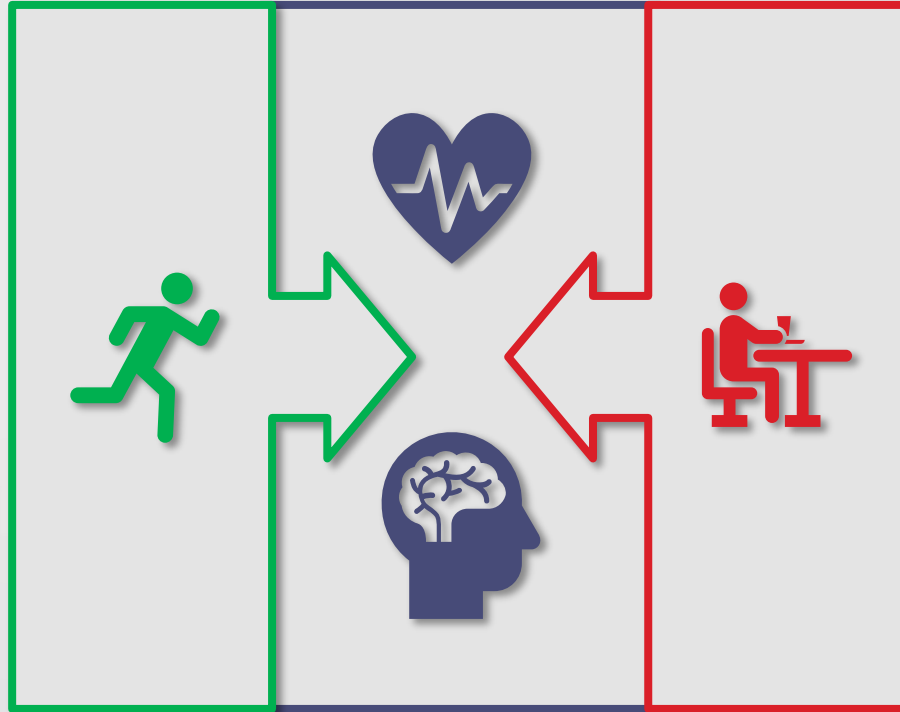
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OUTLINE

- Introduction
- Method
- Results
- Discussion & Conclusion

SEDENTARY BEHAVIOUR AND ITS RISKS



SEDENTARY BEHAVIOUR

BENEFITS



- Increase in selective attention
- Improvement of cognitive functioning
- Less lapses of attention
- Perceived effect on attention and focus



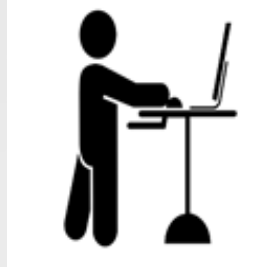
- energy expenditure increased
- Significant reduction in musculoskeletal discomfort



- Less depressive symptoms and psychological distress
- reduction of 60 minutes significantly improved mental wellbeing



SIT TO STAND DESKS



- Enjoyed standing desks
- In favour of standing desks
- Decreased restlessness
- Increased attention
- **No research has been done in the VET setting**
- 80% unhealthy sedentary lifestyle
- Generalization is not sufficient
- Used rotating system



RESEARCH QUESTION

What is the feasibility and acceptability of implementing “sit to stand desks” in classrooms with VET students.



METHODS

2 classes
selected

- Information session
- Classrooms equipped

First week

- No motivation from teachers
- Students did not use the desks

Second and
third week

- Students were actively motivated

Focus group
interviews

- 33 students
- 6 focus groups



METHODS

Focus group interviews

1. Usage of the standing option of the "sit to stand desks"

Do students use the standing option, and what triggered them to use or not use it?

2. Reasons for using the "sit to stand desks"

Can students think of reasons why they would or would not use a standing desks?

3. Experienced effect

What do students notice when using the standing option of the "sit to stand desks"?

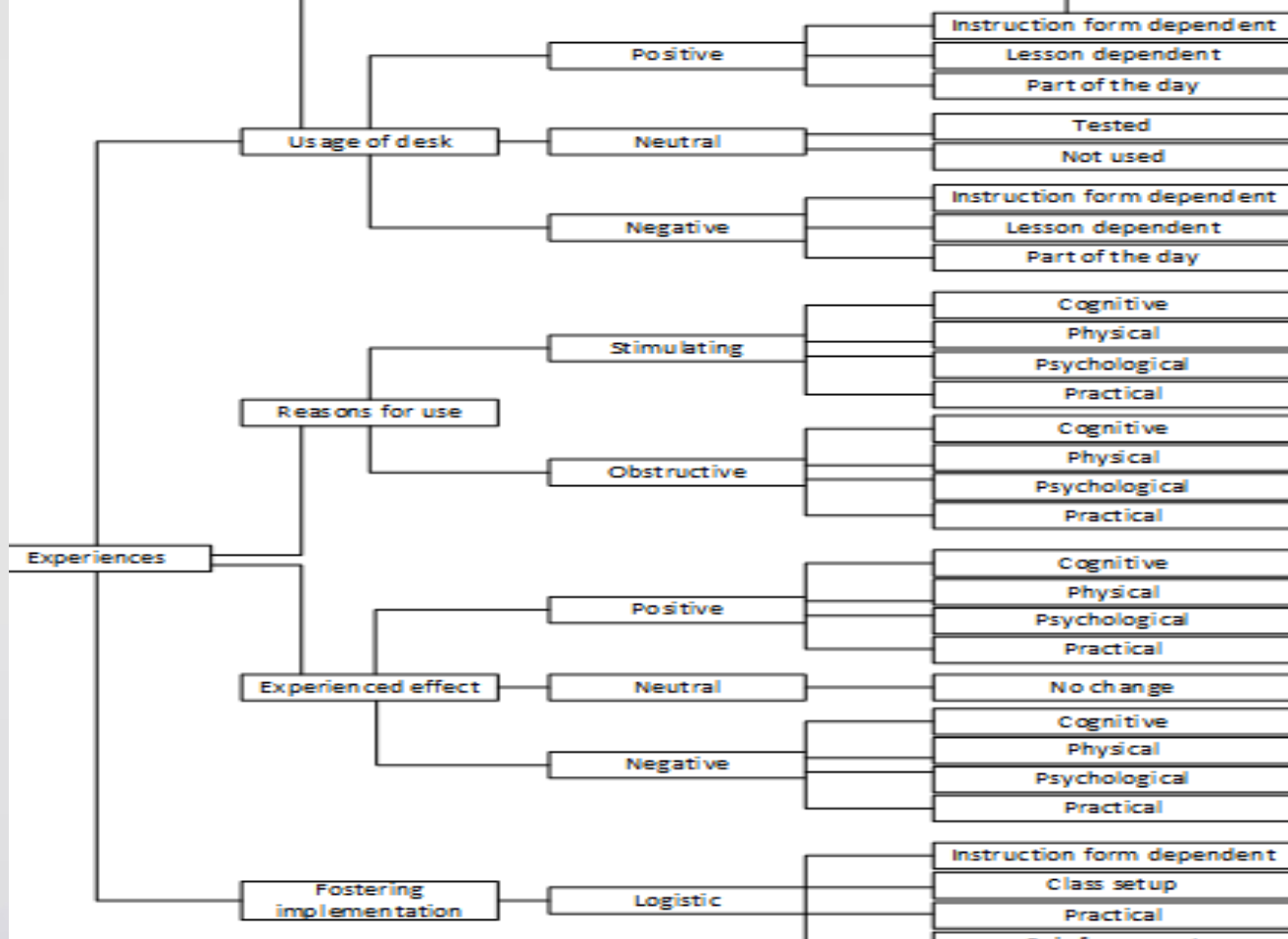
4. Fostering future "sit to stand desks" usage

What do students need to use the standing option of the desks in the future?



Themes based upon a research from Verloigne et al. (2018)

Subthemes based upon the interview protocol and what was said during the focus groups



RESULTS

The usage of the “sit to stand desk”

“Because it was mandatory”

“Only during my Dutch class presentation”

Positive

Instruction form dependent	Motivating and giving instruction to stand
Lesson dependent	Standing behind the “sit to stand desks” is practical for some lessons
Part of the day	Not applicable

“Everybody had to stand according to the teacher, but some just really did not want to”

Neutral

Tested	The upright position is tested
Not used at all	Not used the upright position

“With algebra it would not be possible, I think”

Negative

Instruction form dependent	Instructions gave a counterproductive response, not standing
Lesson dependent	Mentioned once, not practical during a specific lesson
Part of the day	Too early to stand in class

“But at half past eight I really do not want to stand”



RESULTS

Stimulating and obstructive reasons for using standing desks

Stimulating	Cognitive	Increase of alertness and on task behaviour	"Because you show more on task behaviour"	"Maybe it is better for our posture and our back"
	Physical	Improvement of body position/posture		
	Psychological	Increase of feelings of autonomy and safety	"For presenting it is nicer, I think"	"It is nice that you have some kind of freedom"
	Practically	Promoting communication and presentation		"Because I do not want to distract others"
Obstructive	Cognitive	Distracting other students.	"you will probably get a hollow or arching back, or you stand on one leg"	"So, maybe we are too insecure to stand"
	Physical	Discomfort in muscles and joints, tiring		
	Psychological	Scared of being the centre of attention, and not conforming to peer norms		
	Practically	Blocking the view to the front of the class	"You could stand in somebody's sight"	



RESULTS

Experienced effect of using the standing desk

Positive	Cognitive	Not applicable	"You could put it a bit higher, causing you to sit up straight, I liked that. I had less back pain"	"It is just nice to stand every once in a while"	"I liked that you can adjust it in height"
	Physical	Adjusting the height for a comfortable posture while seated			
	Psychological	Nice feeling			
	Practical	Being able to adjust the height of the desk			
Neutral	No change	No difference noticed between a standing or seated lesson			"It is distracting"
Negative	Cognitive	Loss of focus and concentration	"Because my legs hurt, and my feet hurt"		
	Physical	Discomforts like hurting feet and legs		"Sometimes people did stand, but then the whole class started looking like, oh the table is going up"	
	Psychological	Lack of conforming with the group norm and fear of being the centre of attention			
	Practical	Unstructured messy classrooms and unstable not well-designed sit-to-stand desks.			
		"And then I stood and the table was very much wobbling back and forth the whole time while typing, so I quickly sat down again"			

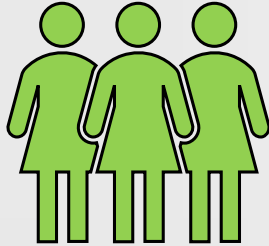


RESULTS

Fostering implementation	
Instruction form dependent	Need support from teachers in the form of instructions. This could be either with a specific task, during a specific part of a lesson (i.e. when course material was explained), or just a few minutes at a specific point in time (i.e. beginning, middle or end of a lesson). <i>"I think teachers should motivate us more to use the desks"</i> <i>"Or during instructions"</i>
Class setup	Desk placement was an important factor to keep in mind when implementing the desks (i.e. u-formation vs traditional setup, putting standing desks in the back). All desks should be in standing position upon arrival. <i>"Maybe another setup, as X said, tables in the back for students who want to stand, and the students who want to sit in the front"</i>
Practical	Desks should be easy to use, feel stable and sturdy. <i>"Yes, they have to become more robust"</i>
Reinforcement	Compensation for standing up in class by having shorter lessons. <i>"Get a price for our tiredness"</i>



DISCUSSION & CONCLUSSION



QUESTIONS OR SUGGESTIONS

