

# Project plan: No pain, no gain – meanings of pain for recreational athletes: negative, positive, both?

## *Relevance and importance to sports (1500)*

Exercising is considered crucial for promoting health and preventing disease due to its “significant health benefits for hearts, bodies and minds” (World Health Organization [WHO], 2020). For at least a decade, a considerable part of organized recreational sports has been directed to promoting health in a wider sense, stating goals of sports such as “feel good and perform more” or providing a “possibility for physical, mental, social or cultural development” (Idrottsrörelsens idéprogram, 2019: 7/8).

However, app. 20% of the Swedish population rarely or never exercise (idrottsstatistik.se/motion-och-fysisk-aktivitet/fysisk-aktivitet, 4 September 2022), imparting significance to questions about beneficial conditions for making people exercise. These questions are usually addressed with regard to personal motivations to actually exercise.

The proposed study contributes to this field but focuses on exercising’s implicit conditions by investigating the subjective meaning of pain for active recreational athletes who exercise at the gym as a popular place for exercising. This focus is motivated by the assumption that understandings of pain have the potential to contribute to normative expectations (cf. Pelters, 2018) about exercising as only leading to gain when being painful. These expectations may guide behavior by affecting individual decisions for or against exercise as they may shape ideas about the phenomenon people make motivated decisions about, i.e. exercise.

## *Specific goals and purpose of the project (2500)*

At gyms as present-day fitness temples (Pelters & Wijma, 2016) and valid examples of recreational sports, pain might potentially be regarded as an ordeal or an appeal, depending on its perception as a signifier of doing right (in terms of pushing limits, based on the mantra ‘no pain, no gain’) or wrong (in terms of overstraining).

The study aims at understanding the explicit and implicit meaning of ‘pain’ for active gym-users as examples of recreational athletes, in order to understand what ‘pain’ and its consequences represent in the gym context, how ‘pain’ is related to understanding exercise and how it may work as a constructing element of ‘the true, fit exerciser’ as an identity construction.

Therefore, the following research questions will be focused:

1. What kinds of pain do recreational athletes perceive?
2. What functions do gym-users ascribe to pain, with regard to exercise and their self-understanding as ‘someone who exercises’?

### 3. How are different kinds of pain related to one another in gym-users accounts?

From a perspective that focuses on the self-evident normality (a so-called norm-critical perspective), investigating the meaning that pain offers as such and as a means of identity construction is presumed to elucidate a part of the normative foundation of exercise (cf. Pelters, 2018). This foundation is assumed to be connected to people's motivation to engage in exercising as it may frame what is assessed as 'doing exercise right' and being 'a true, fit exerciser'.

Gaining knowledge about potential normative guidelines is deemed a precondition to actively engage with them in exercise settings or other types of health education. This is the ultimate aim of norm-critical education and may in the long run mitigate normative barriers for exercising.

#### ***Background and previously published results (3500)***

Physical activity (PA) and especially exercise is considered an unequivocal cornerstone of health for everybody, having beneficial impact on the promotion of different dimensions of health as well as the prevention and management of noncommunicable diseases (WHO, 2020). Pain is presumed to affect the motivation to engage in PA and usually addressed as barrier to engage in PA or as something that requires coping, implying this is not an easy task. Common (bio-)medical or public health research therefore often focus on how target groups with certain risks or ailments can be motivated to become physically active and alleviate pain (e.g. Garber, 2019; Cashin et al., 2022).

Pain is hence ascribed a negative connotation despite its positive function as a warning system for overstrain and (imminent) injury (Salwin & Zając, 2016; Olorunyomi et al., 2022). This negative connotation is also highlighted by phenomenological descriptions such as the following of Svenaeus (2020, p. 543) who describes pain as "a way of finding oneself in the world that typically leads to certain emotions of the negative type: frustration, irritation, anger, fear, sadness, self-pity or even loss of hope and trust in others".

Then again, even exercising on a recreational level is about pushing boundaries to improve one's performance. However, pushing oneself to this type of improvement logically requires being capable of at least temporarily enduring something that may be called 'pain' as approaching one's limit may be experienced as extremely unpleasant and painful in itself or regarding its consequences (like sore muscles) as is mentioned, yet not further investigated in the literature (see e.g. Arli et al., 2015). Hence, a certain willingness to endure pain appear to be a prerequisite for (at least certain) recreational athletes' commitment to exercise, as is indicated by personal trainers' accounts of excessive exercising behaviors in the gym (Håman et al., 2017), preliminary observations in a gym and certain forms of advertising (see pdf attached under 'preliminary results').

As this pattern of events is, moreover, recommended as health promoting and health itself has been awarded religious qualities in our health-worshipping societies (Pelters & Wijma, 2016), enduring pain may itself be imbued with meaning and hope. Following this 'painful path' may therefore be considered more than just a necessary ordeal but rather a value or appeal of its own.

Viewed from a norm-critical perspective (Pelters, 2018), enduring pain may be understood as a way of shaping normative expectations about 'the right way' to exercise and grant those who practice accordingly a means of understanding themselves as 'true exercisers' who are superior to those who do not follow the 'no pain, no gain' mantra, an attitude that appears to thrive in the gym context (Håman et al., 2017). As norms are usually communicated, this attitude towards 'good pain' may ultimately contribute to making exercise unalluring and prevent people from engaging in healthy exercising.

While the negative connotation of pain is widely studied and acknowledged, its positive, appealing, possibly normative side is not equally investigated and its definition as 'pain' is contested (cf. Svenaeus, 2020). To study both sides and their potentially normative, ambivalent meaning is the aim of this study.

### *Reasons and considerations for studying women and/or men (1500)*

As Messner (2004, p. 314) states, sports generally is a "a key site for ideological contest over the meanings of 'masculinity,' as well as 'femininity.'" In sports, (hegemonic) masculinity is not least associated with sports activities characterized by pain and its ignorance, where conforming to the "pain principle" yields status. In this regard, the slogan "no pain, no gain" may be understood as "paradigmatic of the health costs paid by boys and men" (ibid, p. 317). Hence, being unawareness of the influence of gender is simply no option.

However, there is a definite rise in popularity concerning the participation in extreme endurance competitions and risky sporting activities that basically applies to all genders (Eren, 2017) and the practice of excessive exercising is neither limited to men (Håman et al., 2017). This is regarded a clue indicating that the appearance of pain and the meaning connected to it in recreational sports is presumably not only or foremost related to the construction of masculinity.

Therefore, I will see to it that men and women will be equally represented among interviewees and if possible even include people with other gender identities. In doing so and by being aware of the masculine pain principle, I create conditions that may enable gender-specific understandings to emerge from the data, although the project outlined here will not pursue this question in particular. The idea is to be able to come back to this issue at a later time.

## *Methodology and plan of work (7000)*

### **Theoretical background**

This study applies a constructivist-hermeneutical methodological framework (Denzin & Lincoln, 2011) in connection with a norm-critical perspective. This perspective directs attention to that which is normal and often unquestioned (such as pain's negative connotation, cf. Svenaeus, 2020), functions in a normative way (such as expecting exercise to be painful in order to provide gain, as the 'no pain, no gain' mantra suggests) and constructs identities (such as 'the exerciser' who is willing to endure pain, cf. Håman et al., 2017) that usually turn out to be favorable and appealing to some, but not all people (Pelters, 2018).

The constructivist-hermeneutical framework and the norm-critical perspective complement each other as people's meaning making is considered to construct a frame for understanding a phenomenon – here: pain in recreational sports – and affect behavior – in this case exercising – by providing normative guidelines that strongly suggest ways of acting, thinking and feeling, which discriminate those who do/are right from those who do/are not, i.e. creates in- and an outgroup with a hierarchical relation with each other. The norm-critical perspective opens hence up for investigating hierarchies of power and privilege concerning exercising which may limit some people's chance to commit to this important kind of health work.

### **Participants and setting**

Aimed-for participants consist of 30 adult gym-users varying in age and gender (with an equal number of male and female participants) who do not have ambitions to compete. All of them are supposed to actively work out at one of the ten different Åkersberga-based gyms, which cover a range from representing national chains to local enterprises and from pursuing recreational to physiotherapeutic purposes. It is of importance not to collect data from one gym only, as the gyms may have different microcultures regarding the role and understanding of pain in exercise.

Gyms are chosen as representatives of recreational sports as they represent iconic locations for health-motivated work-outs (Pelters & Wijma, 2016) where excessive exercise practices potentially may thrive (Håman et al., 2017). With ten gyms, Åkersberga has a relatively high gym density with regard to its' population of 28.000 inhabitants. Hence, the town represents a promising context for collecting data as that amount of gyms probably only can survive in case the town's inhabitants are keen on using them. Moreover, as a commuter town close to Stockholm, its inhabitants are settled between living rural and urban, which may hopefully provide broader results.

### **Data collection**

All Åkersberga-based gyms will be approached with a request to inform all members and gather participants for the study both on site and online. Contacts with potential participants

will be established via mail and by phone. Participants will be given a choice on the interview environment between being interviewed at home or at the university department to promote a comfortable information exchange. The recruitment is planned to take place January to March 2023, as soon as the ethical approval is received.

A number of 30 individual semi-structured interviews (for procedure, see Denzin & Lincoln, 2011) with an assumed length of 30-45 minutes are planned to achieve theoretic saturation. The interviews will be initiated by using prompts, such as the slogan “no pain, no gain” or the image entitled “Pain never felt so good” (attached in the section on “Preliminary results”). An interview guide will then be followed which consists of a range of themes such as experiences and perceptions of pain, (ambivalent) emotions regarding pain, reflections on pain’s role in exercise, its relation with one’s personal motivation to work out, experiences of talking about or showing pain in different situations (such as classes) in the gym or other indications of group dynamics etc. Using broader themes instead of fixed questions is supposed to support an explorative approach regarding data collection. This approach is chosen not to fall prey to preliminary assumptions derived from the field observation and the norm-critical perspective.

The interviews will be recorded and transcribed verbatim and data will be securely stored. Data collection is planned to take place in April and May 2023.

## **Analysis**

The analysis will be based on inductive qualitative content analysis (Granehem & Lundman, 2004) yet undertaken from a hermeneutical stance, focusing on tacit assumptions and implicit meanings. Hence, both “what the text [manifestly] says” and “what the text [latently] talks about” (Granehem & Lundman, 2004, p. 106) regarding a phenomenon (here: pain in the context of exercise) can be investigated.

In practice, the analytic process comprised of three sometimes overlapping stages:

- The first stage, coding, is guided by the question of what is going on in the data while being aware of possible implicit meanings and assumptions. The identified meaning units can differ significantly in size, ranging from words to parts of complete or even several sentences.
- On the next stage, codes are grouped into categories, which then are probed regarding their meaning by asking “what does X mean” with “X” being a resulting category. That meaning is derived by going back to the codes and data that signify the category with the intention of finding characteristic traits on a latent level.
- On the last stage, overarching themes are identified while the process of capturing the latent meaning of pain in exercise continues by identifying the characteristics of the themes as emerging from their contributing categories. The finally emerging comprehensive themes from these meaning-enriched codes and categories are therefore located on a deeper level.

The results will be validated in discussion with other experienced qualitative researchers during department-internal seminars. The analysis will be performed in June to October 2023.

A similar methodical/methodological approach has been applied in Pelters & Galanti (under review).

### **Considerations regarding open science**

The results of the study will be published in an open access journal as is promoted by Stockholm university's open science concept. The fabrication of the manuscript is scheduled for November and December 2023.

Moreover, a data management plan is mandatory, according to the general rule of openness and SU's Research data policy, stating: "Research that is fully or partially funded by public means should be publicly accessible and managed in accordance with internationally accepted principles [in particular the FAIR Data Principles] as far as possible with regard to legal, ethical and (where applicable) commercial aspects." (<https://www.su.se/staff/organisation-governance/governing-documents-rules-and-regulations/research/research-data-policy-1.387809>, accessed 8 Sept 2022). A plan will be established accordingly.

### ***Considerations regarding ethics (1000)***

The aim and data collection approach of the project demand for ethical approval. Questions of participants' integrity and data security need to be addressed properly when dealing with pain in the general context of health, as these are potential sources of individual vulnerability. In particular, issues of integrity and exposed vulnerability with regard to health need to be addressed.

To safeguard integrity and avoid exposing vulnerability, the demands for informing participants, getting informed consent; storing, analyzing and publishing data in a secure, confidential, anonymous way and confining access to research use only (in accordance with the requests of open sciences) will be applied.

In sum, all rules and regulations for good ethical research conduct as specified by the Swedish Research Council in accordance with the Swedish Ethical Review Act (SFS 2003:460) will be followed. Ethical approval will be obtained as soon as the funding issue is solved.

### ***Preliminary results (2500)***

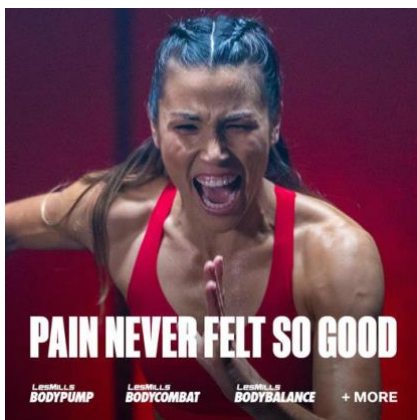
Previous to outlining the project, a field observation has been conducted at one of the gyms in Åkersberga (Friskis & Svettis). During a period of several months, meanings ascribed to pain has been noted which could be observed during different classes and in their descriptions in the booking system. It could be established that certain kinds of hardships (considerably exceeding one's limits during certain activities) and pain (sore muscles in particular) are

attributed a positive meaning. Even the attached advertisement alludes to that meaning and applies it as a means of attracting customers.

However, these are incidental, anecdotal observations which do neither prove that ascribing positive meaning to pain is a general phenomenon nor that gym-users refer these meanings to themselves and their exercising practice. Hence, a systematic, explorative investigation is deemed necessary, as is outlined in this project proposal.

It is vital to mention that I am aware that these observations, however incidental, have shaped preliminary assumptions and expectations about what results which could be potentially expected from the project. Even the norm-critical perspective may direct attention and suggest certain kinds of results/conclusions. My safeguard for taking as neutral a stance as possible towards the data is my awareness of the preliminary assumptions connected to the ‘no pain, no gain’-mantra on the one hand and on the other my possibility to get feedback from my highly qualified colleagues as potential ‘eyeopeners’.

(pdf: Pain never felt so good)



### Reference list (max 15, 3500)

1. Arli, D., Kubacki, K., Rundle, T. S., Pekerti, A. A., & Tkaczynski, A. (2015) No pain, no gain: insights into changing individual volitional behaviour. *International Journal of Nonprofit & Voluntary Sector Marketing* 20(2): 100–187. Doi: 10.1002/nvsm.1524
2. Cashin, A.G., Booth, J., McAuley, J.H., D Jones, M.D., Hübscher, M., Traeger, A.C., Fried, K. & Moseley, G.L. (2022) Making exercise count: Considerations for the role of exercise in back pain treatment. *Musculoskeletal Care* 20(2): 259-270. Doi: 10.1002/msc.1597
3. Denzin N.K., & Lincoln Y.S. (Eds.) (2011) *The SAGE handbook of qualitative research*. Thousand Oaks: SAGE Publications.



4. Eren, C.P. (2017) Estranged Labor, Habitus, and Verstehen in the Rise of Extreme Endurance Sports. *Journal of Sport and Social Issues* 41(5): 384-401. Doi: 10.1177/0193723517719663
5. Garber, C.E. (2019) The Health Benefits of Exercise in Overweight and Obese Patients. *Current Sports Medicine Reports* 18(8): 287-291. Doi: 10.1249/JSR.0000000000000619
6. Graneheim, U.H., & Lundman, B. (2004) Qualitative content analysis in nursing research: concept, procedures and measures to achieve trustworthiness. *Nurse Education Today* 24: 105-112. Doi: 10.1016/j.nedt.2003.10.001
7. Håman, L., Lindgren, E.C. & Prell, H. (2017) “If it’s not Iron it’s Iron f\*cking biggest Ironman”: personal trainers’ views on health norms, orthorexia and deviant behaviours, *International Journal of Qualitative Studies on Health and Well-being*, 12:sup2, 1364602, DOI: 10.1080/17482631.2017.1364602
8. Messner, M.A. (2004) Still a man’s world? Studying Masculinities and Sport. In: Connell, R., Hearn, J. & Kimmel, M.S. (Eds.) *Handbook of Studies on Men and Masculinities*. SAGE Publications, p. 313-325.
9. Olorunyomi, O.O., Ie Liem, R. & Li-yen Hsu, L. (2022) Motivators and Barriers to Physical Activity among Youth with Sickle Cell Disease: Brief Review. *Children* 9(4): 572. Doi: 10.3390/children9040572
10. Pelters, B. & Wijma, B. (2016) Neither a sinner nor a saint: Health as a present-day religion in the age of healthism. *Social Theory & Health* 14(1): 129–148. Doi: 10.1057/sth.2015.21
11. Pelters, B. (2018) On mountains and prophets: targeting majorities to support minorities by using norm-critics in health education. *International Journal of Qualitative Studies on Health and Well-being*, 13:sup1, 1522203. Doi: 10.1080/17482631.2018.1522203
12. Riksidrottsförbundet (2019) *Idrotten vill - Idrottsrörelsens idéprogram*. <https://www.rf.se/omriksidrottsforbundet/idrottsrorelsensstyrandedokument/idrottenvillidrottsrorelsensideprogram>, accessed 8 September 2022.
13. Salwin, E., & Zajac, A. (2016) Pain tolerance in sport. *Baltic Journal of Health & Physical Activity* 8(3): 71–80. Doi: 10.29359/BJHPA.08.3.08
14. Svenaeus, F. (2020) Pain. In: Szanto, T. & Landweer, H. (Eds): *The Routledge Handbook of Phenomenology of Emotion*, p. 543—552.
15. World Health Organisation (WHO, 2020) *Physical activity*. <https://www.who.int/news-room/fact-sheets/detail/physical-activity>, accessed 2 September 2022.

## Summary

### Background

Exercising is considered crucial for promoting health. Pain is often discussed as either to be overcome by physical exercise or as a barrier to engage in recreational sports. However, exercising is about pushing boundaries to improve one’s performance. This pushing logically requires to (temporary) endure something that could be understood as pain, as exceeding one’s limit may be experienced as extremely unpleasant. Hence, a certain willingness to endure pain appear to be a prerequisite for recreational athletes’ health-related exercises.



## **Aim**

The study aims at understanding the meaning of pain for recreational athletes as exemplified by gym-users. The following research questions will be focused:

1. What kinds of pain do gym-users perceive?
2. What functions do gym-users ascribe to pain, with regard to exercise and their self-understanding as 'someone who exercises'?
3. How are different kinds of pain related to one another in gym-users' accounts?

## **Schedule of work and methods**

A qualitative explorative interview study will be performed, including individual interviews with app. 30 active gym-users of all genders. These will be recruited in different gyms in Åkersberga, a small town (28000 inhabitants) located in commuting distance to Stockholm, with a high gym density of 10 different gyms. The different gym types serve different target groups, which is considered to improve data collection. Data will be analyzed by meaning-focused qualitative content analysis.

Work plan:

- Jan-Feb: recruit participants
- March-May: collect data
- June-Oct: analyze
- Nov-Dec: write publication

Theoretically, the study is based on a post-constructivist framework and a norm-critical, hermeneutic stance is applied.

## **Importance**

The study's norm-critical, hermeneutic stance allows for an enhanced understanding of the role of pain in exercise by focusing on their ambivalent and potentially positive, motivational contribution as a normative signifier of 'doing exercise right' and 'being/becoming better'. Moreover, as those norms usually function in an appealing way only for some, not all people, certain people's chances to commit to this important kind of health work may be limited. Here, the study results intend to contribute to a foundation for actively engaging with and mitigating normative barriers concerning exercise in education, ultimately contributing to the improvement of health promotion by introducing a norm-critical approach.

*No pain, no gain – innebörderna av smärta för motionärer: negativ, positiv, både och?*

## **Populärvetenskaplig sammanfattning (800)**

Mottot 'no pain, no gain', utan smärtor inga hälsovinster, är populär i samband med träning. Förutom negativa smärtor från skador eller sjukdomar verkar det alltså finnas smärtor som man som motionär snarare ska sikta på, goda smärtor som bidrar på ett positivt sätt till ens

(hälso-)utveckling. Att kunna stå ut med obekväma träningsituationer som gränsar vid smärta skulle t.o.m. kunna tolkas som något som kännetecknar en äkta motionär, som underordnar obehaget i stunden hälsovinsten i längden.

I denna studie ska 30 gymmande motionärer av alla åldrar och kön intervjuas om sina synsätt på smärta i samband med träning för att förstå deras innebörd för motionärer och deras motivation samt smärta betydelse för vad som krävs för att gymma på rätt sätt.