

Can socio-emotional selectivity theory help to tailor psychooncological interventions?

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Background

Socio-emotional selectivity theory (SST, Carstensen, 2006) postulates that motivational focus depends on time perspective, like expectation about remaining life span. With open future time perspective (FTP) humans focus on information gathering, whereas individuals with a restricted FTP focus on emotion regulation. We wondered whether SST can help to tailor psychooncological interventions and can be used to interpret age effects found in our distress screening (Scharpf et al. 2017). We hypothesized that patients in early disease stages and younger patients are mainly interested in information about their disease and treatment whereas patients in advanced disease stages and older patients mostly need support in emotion regulation.

Methods

Sample: From 2014 to 2019 all cancer patients treated in our cancer center were asked to fill out the standardized 7-item-version of the Hornheider Screening Inventory (HSI, Strittmatter et al, 2002) at admission to the hospital. 4627 questionnaires were returned. For data analyses of the current project, we only included the data of those patients who meanwhile died (N = 253). With this subsample we wanted to operationalize the variable of future time perspective (remaining life time).

Measure: We concentrated our analyses on 2 items, which measure the two motivation realms relevant according to SST: *Information gathering* (item 7): „How well informed do you feel about your illness and treatment?“ and *Emotion regulation* (item 4): „Do you have somebody to talk about your sorrows?“.

Data analyses: To test for age group differences, we did a median split (Md = 69) and conducted non-parametric tests (Fisher exact test for item 4 (two levels) and Wilcoxon test for item 7 (three ordinal levels)). In addition, we looked whether there was a difference between the age groups in the wish for psycho-oncological support and whether there was a correlation between age and duration of psychooncological intervention.

Results

SST-Hypotheses:

Motivation for *Information Gathering* (item 7):

Age: $p < .001$ (wilcoxon test)

Motivation for *Emotion regulation* (item 4)

Age: $p > .05$ (fisher test)

Exploratory Analyses:

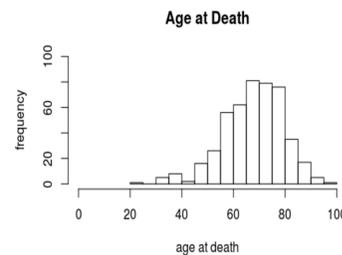
Correlation between age and duration of psychooncological intervention:

$r = -.22$, $p < .001$

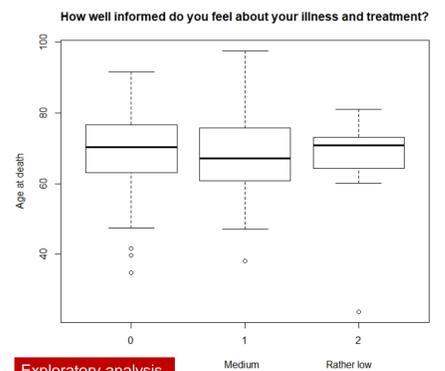
Wish for psychooncological support:

Age: n.s. $p = .89$ (fisher exact)

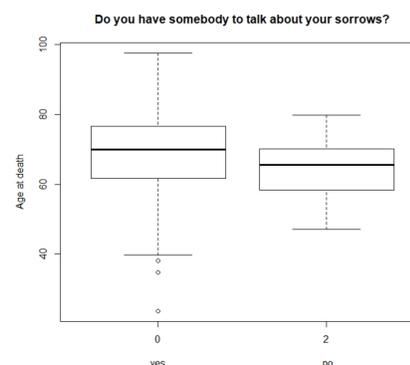
Sample description



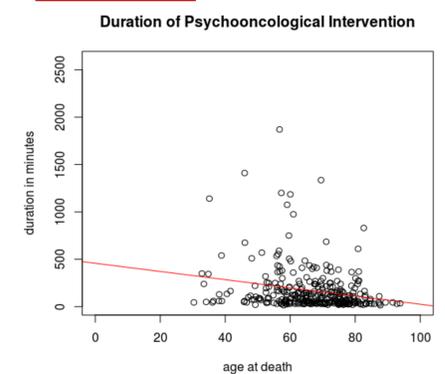
Information gathering (item 7)



Emotion regulation (item 4)



Exploratory analysis



Discussion

Socio-emotional selectivity theory can explain why age is a relevant variable for psychological distress and need for psychooncological support:

Due to their longer future time perspective younger patients have a higher need for information than older patients.

When confronted with the limitation of this time perspective, they more frequently have nobody to talk about their sorrows than older patients and therefore need professional support to regulate their emotions.

Reasons for this may be:

- equally aged peers do not understand them, because illness and death are outside of their field of experience.
 - they want to protect their loved ones from their thoughts and feelings about illness progression and possible death.
- therefore it is important that the psychooncological staff helps them to find functional ways to deal with their sorrows (e.g. by consulting them how to talk with others about their inner life or by learning psychotherapeutic techniques helping to regulate emotions like anxiety, sadness, anger, shame and guilt.)

Limitation: With the current data, we did not measure „Future Time Perspective“ directly. This should be done in future studies.

Literature

- Carstensen, L. L. (2006). The influence of sense of time on human development. *Science*, 312 (5782): 1913-1915.
- Strittmatter, G., Tilkorn, M. & Mawick, R. (2002). How to identify patients in Need of psychological interventions. *Recent Results Cancer Res.*, 160: 353-61
- Scharpf, K.R. La Mura, S. A., Höper, S., Kasper, B. & Bohus, M. (2017). Age differences of interpersonal Coping measured by a psychooncological screening questionnaire. Poster at the IPOS-Conference 2017, Berlin

