## Supplement 1.

Model basics. At the first level, five phases (baseline, education, exposure, 3-month follow-up and 6-month follow-up) were modeled with four dummy variables:

$$
\begin{align*}
& Y_{i j}=\beta_{0 j}+\beta_{1 j}(\text { Education })_{i j}+\beta_{2 j}(\text { Exposure })_{i j}+\beta_{3 j}(3 \text { MFollowUp })_{i j}+  \tag{1}\\
& \beta_{4 j}(6 \mathrm{MFollowUp})_{i j}+e_{i j},
\end{align*}
$$

where $Y_{i j}$ denotes the $i$ th observation belonging to patient $j$ and $e_{i j}$ denotes the normally distributed sampling error with mean 0 and standard deviation $\sigma_{e}$. Each of the dummy covariates Education, Exposure, 3MFollowUp and 6MFollowUp equals 1 if an observation $i j$ belongs to the respective phase and 0 otherwise. Due to this coding scheme, $\beta_{0 j}$ can be interpreted as the patient $j$ 's expected baseline level $\left(\right.$ when $\left.(\text { Education })_{i j}=(\text { Exposure })_{i j}=(3 \mathrm{MFollowUp})_{i j}=(6 \mathrm{MFollowUp})_{i j}=0\right)$ of the outcome. The other coefficients $\beta_{1 j}, \beta_{2 j}, \beta_{3 j}$ and $\beta_{4 j}$ can be interpreted as the change in level of the phase (respectively the education, exposure, three-month follow-up and six-month follow-up phase) with respect to the baseline phase. At the second level, each of the patient specific coefficients $\beta_{. j}$ are split up in an overall average effect $\gamma_{. .}$plus a patient specific random effect $u_{. j}$ :

$$
\left\{\begin{array}{l}
\beta_{0 j}=\gamma_{00}+u_{0 j}  \tag{2}\\
\beta_{1 j}=\gamma_{10}+u_{1 j} \\
\beta_{2 j}=\gamma_{20}+u_{2 j} \\
\beta_{3 j}=\gamma_{30}+u_{3 j} \\
\beta_{4 j}=\gamma_{40}+u_{4 j}
\end{array} \quad\left(\begin{array}{l}
u_{0 j} \\
u_{1 j} \\
u_{2 j} \\
u_{3 j} \\
u_{4 j}
\end{array}\right) \sim N\left(\mathbf{0}, \Sigma_{u}\right)\right.
$$

The random effects $u_{. j}$ have joint mean zero and their $(4 \times 4)$ covariance matrix is given by $\Sigma_{u}$.
As explained in the previous paragraph, observations were collected for four pain-related outcome measures (fear, avoidance, acceptance and catastrophizing) plus an overall measure of pain. These five outcomes showed high and statistically significant correlations among them (Table 2). Combining all five outcomes into one multivariate multilevel analysis would therefore have been appropriate, because such model would yield estimates of these correlations as well as increase the power in inference. However, it was not feasible to estimate a multivariate model in this case. The reason for this was that in practice,
multivariate models are often estimated by adding dummy variables for each outcome to a univariate model. Along with the four dummy variables for the different phases, this approach led to a model with a substantial number (5+4=9) of covariates, without even considering other moderator variables (as we discuss below). Estimating the parameters of such a large multilevel model on a hierarchical dataset with only 27 units (patients) at the second level did not lead to converged and reliable parameter estimations with the Ime4 package in R. This was repeated with PROC MIXED in SAS and yielded similarly problematic estimates.

Model extension. The model in equations 1 and 2 assumes horizontal trajectories in all four of the phases. However, the treatment (i.e. the education and exposure phases) was long with respect to the baseline and follow-up phases and scatterplots revealed clear visual trends in the treatment phase of some of the patients. Therefore, an extended model including a slope in the treatment phase was considered:

$$
\begin{align*}
Y_{i j}=\beta_{0 j}+\beta_{1 j} & (\text { Education })_{i j}+\beta_{2 j}\left(\frac{\text { Day }}{10}\right)_{i j} \times(\text { Education })_{i j}+\beta_{3 j}(\text { Exposure })_{i j} \\
& +\beta_{4 j}\left(\frac{\text { Day }}{10}\right)_{i j} \times(\text { Exposure })_{i j}+\beta_{5 j}(3 M F o l l o w U p)_{i j} \\
& +\beta_{6 j}(6 \mathrm{MFollowUp})_{i j}+e_{i j} \\
& \left\{\begin{array}{l}
\beta_{0 j}=\gamma_{00}+u_{0 j} \\
\beta_{1 j}=\gamma_{10}+u_{1 j} \\
\beta_{2 j}=\gamma_{20}+u_{2 j} \\
\beta_{3 j}=\gamma_{30}+u_{3 j} \\
\beta_{4 j}=\gamma_{40}+u_{4 j} \\
\beta_{5 j}=\gamma_{50}+u_{5 j} \\
\beta_{6 j}=\gamma_{60}+u_{6 j}
\end{array}\right.  \tag{3}\\
& \left.\begin{array}{l}
u_{0 j} \\
u_{1 j} \\
u_{2 j} \\
u_{3 j} \\
u_{4 j} \\
u_{5 j}
\end{array}\right) \sim N\left(\mathbf{0}, \Sigma_{u}\right)
\end{align*}
$$

where $(\text { Day } / 10)_{i j}$ is a numerical variable indicating the day of the treatment phase in which observation $i j$ was observed, divided by ten. Again, the residuals $e_{i j}$ are assumed to be normally distributed with mean 0 and standard deviation $\sigma_{e}$. The random effects $u_{. j}$ have joint mean zero and their $(6 \times 6)$ covariance
matrix is given by $\Sigma_{u}$. If an observation $i j$ belongs to the exposure phase, the first-level regression equation reduces to:

$$
\begin{equation*}
Y_{i j}=\beta_{0 j}+\beta_{3 j}+\beta_{4 j}\left(\frac{\mathrm{Day}}{10}\right)_{i j}+e_{i j} . \tag{4}
\end{equation*}
$$

Recall that $\beta_{0 j}$ is the average outcome for patient $j$ in the baseline phase. At day zero in the exposure phase, the average outcome is $\beta_{0 j}+\beta_{3 j}$. Thus $\beta_{3 j}$ denotes the immediate effect of the treatment at the start of the treatment phase. During the treatment phase, $\left(\frac{\text { Day }}{10}\right)_{i j}$ increases with 1 point every ten days. Ten days into the treatment phase the outcome of patient $j$ will be $\left(\beta_{0 j}+\beta_{3 j}\right)+\beta_{4 j}$ on average, and after twenty days it will be $\left(\beta_{0 j}+\beta_{3 j}\right)+2 \beta_{4 j}$. Thus $\beta_{4 j}$ denotes the change in the average response of patient $j$ every ten days during the treatment phase. An analogous rationale holds for the interpretation of the education phase regression parameters $\beta_{1 j}$ and $\beta_{2 j}$.

The individual regression line for a case $j$ can be derived by using the empirical Bayes estimates $\hat{\beta}_{0 j}$, $\hat{\beta}_{1 j}$, $\hat{\beta}_{2 j}, \hat{\beta}_{3 j}, \hat{\beta}_{4 j}, \hat{\beta}_{5 j}$ and $\hat{\beta}_{6 j}$, obtained from the multilevel model estimation:

$$
\begin{aligned}
Y_{i j}=\hat{\beta}_{0 j}+\hat{\beta}_{1 j}(\text { Education })_{i j} & +\hat{\beta}_{2 j}\left(\frac{\text { Day }}{10}\right)_{i j} \times(\text { Education })_{i j}+\hat{\beta}_{3 j}(\text { Exposure })_{i j} \\
& +\hat{\beta}_{4 j}\left(\frac{\text { Day }}{10}\right)_{i j} \times(\text { Exposure })_{i j}+\hat{\beta}_{5 j}(3 \text { MFollowUp })_{i j}+\hat{\beta}_{6 j}(6 \mathrm{MFollowUp})_{i j}
\end{aligned}
$$

Model inference. For the fixed effects, $p$-values are calculated based on a Wald-type T-test with Kenward-Roger's degrees of freedom approximation. For each of the random effects, likelihood ratio tests are conducted, where two models with and without each individual random effect are compared to see whether the inclusion of the random effect significantly improved the model fit.

Model with treatment (education + exposure) as one phase. These analyses were repeated with treatment as one combined phase (four total phases) with results detailed in Table 4b.

```
Phase I
    Build rapport
    Obtain brief patient history and family's impressions of GET Living referral
    Gather information and provide education on the Pain Dilemma
    Provide education on the Cycle of Avoidance
    Introduce GET Living treatment paradigm
    Review events of past week and discuss observations from self-monitoring
    Increase program engagement through motivational interviewing strategies
    Identify unproductive patterns of avoidance, using the FAM/IFAM model
    Present individualized FAM formulation
    Introduce pain willingness and activity engagement as tenets of GET Living Model
```

    Phase II
    Review events of past week and discuss observations from self-monitoring
    Review the IFAM model and Path to GET Living model homework
    Introduce values and complete values assessment worksheet
    Begin to complete values-based treatment goals worksheet
    Phase III
    Review events of past week and discuss observations from self-monitoring, and
    values-based goals worksheets
    Review rationale for exposures \& exposure graphs
    Review PHODA results and select activities for upcoming exposure sessions
    Create an Activity Step Ladder and introduce WILD ratings (Willingness, Importance,
    Likelihood of Success, Degree of Difficulty)
    Create an Exposure Action Plan
    Phase IV
    Review events of past week and discuss observations from self-monitoring
    Revisit rationale for exposures and habituation, if necessary
    Conduct an initial exposure with a slightly worrisome activity
    Complete exposures and use behavioral experiments, WILD ratings before and after
    Review Home-Based Exposures (HBEs)
    Review previous experiences and look ahead
    Discuss dealing with difficult exposures
    Discuss upcoming termination
    Phase V
    Review events of past week and discuss observations from self-monitoring
    Review Home-Based Exposures (HBEs)
    Review patient progress and discuss relapse prevention
    Identify Long-Term Goals
    Target potential obstacles with the Hot Seat Activity
    Review long-term goals, obstacles, and plans for overcoming
    Generate top lessons learned
    Graduation
    Note. Elements in bold are ACT-consistent and depart from the original GET approach.

Supplemental Table 2a. Non-overlapping Pairs (NAP) effect sizes for Fear

| Child | Fear |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | A-B | A-C | A-D | B-C | B-D |  |
| T1 | $1.51(0.36)$ | $5.00(0.97)$ | $5.00(0.97)$ | $6.52(1.0)$ | $6.52(1.0)$ |  |
| T2 | $0.79(0.72)$ | $0.93(0.76)$ | $0.93(0.76)$ | $0.15(0.56)$ | $0.15(0.56)$ |  |
| T5 | $0.74(0.70)$ | $3.66(1.0)$ | $0.69(0.73)$ | $2.92(0.97)$ | $0.05(0.51)$ |  |
| T6 | $0.63(0.71)$ | $1.04(0.79)$ | $1.20(0.87)$ | $0.41(0.65)$ | $0.57(0.78)$ |  |
| T7 | $0.18(0.40)$ | $0.07(0.47)$ | $0.63(0.85)$ | $0.11(0.55)$ | $0.81(0.93)$ |  |
| T9 | $1.04(0.72)$ | $4.52(1.0)$ | $4.28(1.0)$ | $3.49(0.99)$ | $3.25(0.99)$ |  |
| T10 | $0.0(0.5)$ | $0.0(0.5)$ | $1.63(1.0)$ | $0.0(0.5)$ | $0.0(0.5)$ |  |
| T12 | $1.96(0.04)$ | $4.40(1.0)$ | - | $6.37(1.0)$ | - |  |
| T13 | $0.04(0.47)$ | $2.26(1.0)$ | $1.84(1.0)$ | $2.23(0.99)$ | $1.80(0.99)$ |  |
| T15 | $0.33(0.52)$ | $0.14(0.42)$ | $0.30(0.53)$ | $0.19(0.38)$ | $0.03(0.50)$ |  |
| T17 | $0.09(0.45)$ | $4.91(0.99)$ | $7.85(1.0)$ | $5.00(0.99)$ | $7.94(1.0)$ |  |
| T19 | $0.57(0.29)$ | $0.61(0.20)$ | $0.51(0.43)$ | $0.03(0.33)$ | $0.063(0.69)$ |  |
| T20 | $0.12(0.41)$ | $1.43(1.0)$ | $0.28(0.69)$ | $1.55(0.94)$ | $0.40(0.71)$ |  |
| T21 | $0.10(0.35)$ | $1.21(1.0)$ | $1.79(1.0)$ | $1.31(1.0)$ | $1.89(1.0)$ |  |
| T22 | $1.36(0.10)$ | $5.55(1.0)$ | $5.18(1.0)$ | $6.90(1.0)$ | $6.53(1.0)$ |  |
| T23 | $0.67(0.23)$ | $0.98(0.79)$ | $0.54(0.57)$ | $1.65(0.99)$ | $1.21(0.78)$ |  |
| T24 | $0.82(0.72)$ | $4.42(1.0)$ | $5.90(1.0)$ | $3.59(1.0)$ | $5.07(1.0)$ |  |
| T25 | $0.93(0.19)$ | $2.82(1.0)$ | $2.51(1.0)$ | $3.76(1.0)$ | $3.44(1.0)$ |  |
| T27 | $1.36(0.79)$ | $2.02(0.95)$ | $2.66(1.0)$ | $0.66(0.64)$ | $1.29(0.83)$ |  |
| T29 | $0.77(0.80)$ | $0.12(0.39)$ | $4.67(1.0)$ | $0.89(0.18)$ | $3.90(0.94)$ |  |
| T30 | $1.35(0.80)$ | $1.76(0.20)$ | $3.21(0.0)$ | $0.35(0.38)$ | $1.09(0.12)$ |  |
| T31 | $1.04(0.66)$ | $5.01(1.0)$ | $0.57(0.63)$ | $3.97(0.98)$ | $0.47(0.45)$ |  |
| T32 | $0.08(0.59)$ | $0.26(0.99)$ | - | $0.18(0.94)$ | - |  |
| T34 | $0.77(0.41)$ | $9.46(1.0)$ | $0.46(0.31)$ | $8.68(0.91)$ | $1.24(0.41)$ |  |
| T35 | $0.04(0.52)$ | $0.18(0.45)$ | $0.39(0.48)$ | $0.13(0.47)$ | $0.35(0.41)$ |  |
| T36 | $0.38(0.38)$ | $4.95(1.0)$ | $5.22(1.0)$ | $5.32(1.0)$ | $5.59(1.0)$ |  |
| T37 | $0.95(0.30)$ | $3.98(0.97)$ | $1.84(0.77)$ | $4.94(1.0)$ | $2.79(0.93)$ |  |

Note. Effect size was calculated using the non-overlap of all pairs (NAP), cutoffs for interpreting NAP values were taken from Parker et al 2011, 2009. A large effect is indicated by a NAP value between 0.93-1.0 (green) and a medium effect 0.66-0.92 (orange). A value less than 0.66 indicates a weak/no effect.
Discharge: 0 large effects, 9 medium effects ( 9 total)
Follow-up: 20 large effects, 4 medium effects ( 24 total)
No change: 2 (denoted in red)

Supplemental Table 2b. Non-overlapping Pairs (NAP) effect sizes for Avoidance

| Child | Avoidance |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | A-B | A-C | A-D | B-C | B-D |  |
| T1 | $1.95(0.31)$ | $5.37(1.0)$ | $5.37(1.0)$ | $7.32(1.0)$ | $7.32(1.0)$ |  |
| T2 | $1.94(0.75)$ | $2.94(0.88)$ | $2.94(0.88)$ | $1.0(0.6)$ | $1.0(0.6)$ |  |
| T5 | $0.12(0.52)$ | $1.61(0.84)$ | $0.36(0.63)$ | $1.49(0.83)$ | $0.24(0.61)$ |  |
| T6 | $6.21(0.98)$ | $7.13(1.0)$ | $7.13(1.0)$ | $0.92(0.59)$ | $0.92(0.59)$ |  |
| T7 | $0.19(0.54)$ | $1.98(0.80)$ | $4.98(1.0)$ | $1.79(0.79)$ | $4.79(1.0)$ |  |
| T9 | $3.33(0.89)$ | $6.79(1.0)$ | $6.79(1.0)$ | $3.45(0.89)$ | $3.45(0.89)$ |  |
| T10 | $0.11(0.54)$ | $0.11(0.54)$ | $0.11(0.54)$ | $0.0(0.5)$ | $0.0(0.5)$ |  |
| T12 | $0.83(0.59)$ | $3.18(0.90)$ | - | $2.35(0.74)$ | - |  |
| T13 | $0.18(0.44)$ | $5.63(1.0)$ | $4.63(1.0)$ | $5.44(1.0)$ | $4.44(0.99)$ |  |
| T15 | $2.05(0.00)$ | $1.90(0.02)$ | $0.08(0.47)$ | $0.15(0.56)$ | $1.97(1.0)$ |  |
| T17 | $0.79(0.38)$ | $7.18(0.98)$ | $7.99(1.0)$ | $7.97(1.0)$ | $8.78(1.0)$ |  |
| T19 | $0.01(0.60)$ | $0.03(0.66)$ | $0.11(0.16)$ | $0.02(0.52)$ | $0.12(0.08)$ |  |
| T20 | $2.11(0.97)$ | $0.55(0.70)$ | $0.09(0.51)$ | $1.55(0.09)$ | $2.02(0.06)$ |  |
| T21 | $0.73(0.76)$ | $2.27(1.0)$ | $2.57(1.0)$ | $1.53(1.0)$ | $1.84(1.0)$ |  |
| T22 | $0.17(0.39)$ | $8.04(1.0)$ | $8.07(1.0)$ | $8.21(1.0)$ | $8.24(1.0)$ |  |
| T23 | $0.24(0.30)$ | $2.78(1.0)$ | $1.95(0.88)$ | $3.01(1.0)$ | $2.19(0.92)$ |  |
| T24 | $0.81(0.67)$ | $4.56(0.98)$ | $4.55(0.98)$ | $3.75(1.0)$ | $3.74(1.0)$ |  |
| T25 | $0.98(0.89)$ | $6.21(1.0)$ | $5.51(1.0)$ | $5.23(1.0)$ | $4.53(1.0)$ |  |
| T27 | $1.30(0.71)$ | $1.84(0.79)$ | $3.07(0.86)$ | $0.54(0.58)$ | $1.77(0.75)$ |  |
| T29 | $0.33(0.51)$ | $3.09(0.07)$ | $0.79(0.77)$ | $3.42(0.01)$ | $0.45(0.75)$ |  |
| T30 | $1.43(0.81)$ | $4.43(0.20)$ | $5.51(0.08)$ | $5.86(0.05)$ | $6.93(0.0)$ |  |
| T31 | $2.86(0.90)$ | $8.75(1.0)$ | $2.29(1.0)$ | $6.02(0.98)$ | $0.45(0.54)$ |  |
| T32 | $0.45(0.31)$ | $2.43(1.0)$ | - | $2.88(1.0)$ | - |  |
| T34 | $0.39(0.46)$ | $4.49(0.69)$ | $0.81(0.41)$ | $8.68(0.92)$ | $1.20(0.48)$ |  |
| T35 | $0.66(0.43)$ | $0.28(0.52)$ | $0.97(0.42)$ | $0.94(0.62)$ | $0.31(0.47)$ |  |
| T36 | $0.90(0.60)$ | $2.22(0.77)$ | $2.21(0.80)$ | $1.32(0.79)$ | $1.30(0.80)$ |  |
| T37 | $1.01(0.28)$ | $0.40(0.33)$ | $0.44(0.43)$ | $1.42(0.69)$ | $1.46(0.74)$ |  |

Note. Effect size was calculated using the non-overlap of all pairs (NAP), cutoffs for interpreting NAP values were taken from Parker et al 2011, 2009. A large effect is indicated by a NAP value between 0.93-1.0 (green) and a medium effect 0.66-0.92 (orange). A value less than 0.66 indicates a weak/no effect.
Discharge: 2 large effects, 8 medium effects ( 10 total)
Follow-up: 13 large effects, 9 medium effects ( 22 total)
No change: 2 (denoted in red)

Supplemental Table 2c. Non-overlapping Pairs (NAP) effect sizes for Catastrophizing

| Child | Catastrophizing |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | A-B | A-C | A-D | B-C | B-D |
| T1 | $0.44(0.41)$ | $4.41(1.0)$ | $4.41(1.0)$ | $4.85(1.0)$ | $4.85(1.0)$ |
| T2 | $0.25(0.56)$ | $0.25(0.56)$ | $0.23(0.48)$ | $0.00(0.5)$ | $0.48(0.43)$ |
| T5 | $0.07(0.52)$ | $0.13(0.54)$ | $1.66(0.16)$ | $0.20(0.57)$ | $1.59(0.06)$ |
| T6 | $0.67(0.90)$ | $1.86(0.97)$ | $2.47(1.0)$ | $1.19(0.86)$ | $1.80(1.0)$ |
| T7 | $0.76(0.30)$ | $0.56(0.26)$ | $0.50(0.85)$ | $0.20(0.53)$ | $1.25(0.95)$ |
| T9 | $0.17(0.54)$ | $3.57(1.0)$ | $3.09(1.0)$ | $3.40(1.0)$ | $2.93(0.99)$ |
| T10 | $0.04(0.49)$ | $0.80(0.98)$ | $1.63(1.0)$ | $0.84(1.0)$ | $1.67(1.0)$ |
| T12 | $2.12(0.03)$ | $0.21(0.46)$ | - | $1.91(0.95)$ | - |
| T13 | $1.50(0.10)$ | $0.23(0.43)$ | $4.63(1.0)$ | $5.44(1.0)$ | $4.44(0.99)$ |
| T15 | $0.65(0.82)$ | $0.18(0.61)$ | $0.42(0.75)$ | $0.47(0.26)$ | $0.23(0.36)$ |
| T17 | $0.68(0.60)$ | $6.30(1.0)$ | $7.71(1.0)$ | $5.62(0.99)$ | $7.03(1.0)$ |
| T19 | $0.77(0.27)$ | $0.73(0.40)$ | $0.80(0.16)$ | $0.04(0.68)$ | $0.03(0.35)$ |
| T20 | $0.46(0.59)$ | $2.61(1.0)$ | $0.37(0.65)$ | $2.15(0.94)$ | $0.10(0.50)$ |
| T21 | $0.09(0.50)$ | $1.92(1.0)$ | $2.27(1.0)$ | $1.83(1.0)$ | $2.18(1.0)$ |
| T22 | $0.36(0.65)$ | $3.09(1.0)$ | $2.90(1.0)$ | $2.72(1.0)$ | $2.53(1.0)$ |
| T23 | $2.94(0.01)$ | $0.72(0.21)$ | $0.67(0.33)$ | $2.22(0.96)$ | $2.27(0.73)$ |
| T24 | $0.51(0.58)$ | $4.39(1.0)$ | $6.19(1.0)$ | $3.88(0.98)$ | $5.68(1.0)$ |
| T25 | $0.75(0.16)$ | $4.14(1.0)$ | $3.04(1.0)$ | $4.90(1.0)$ | $3.79(1.0)$ |
| T27 | $1.82(0.89)$ | $2.61(1.0)$ | $2.50(1.0)$ | $0.78(0.70)$ | $0.67(0.64)$ |
| T29 | $0.43(0.53)$ | $0.35(0.68)$ | $4.31(1.0)$ | $0.08(0.56)$ | $3.88(0.96)$ |
| T30 | $0.57(0.88)$ | $2.88(0.20)$ | $1.38(0.01)$ | $3.45(0.20)$ | $1.95(0.0)$ |
| T31 | $0.15(0.43)$ | $3.84(1.0)$ | $0.09(0.63)$ | $3.82(0.99)$ | $0.11(0.58)$ |
| T32 | $0.09(0.46)$ | $0.16(0.91)$ | - | $0.25(0.98)$ | - |
| T34 | $1.13(0.57)$ | $9.80(1.0)$ | $0.07(0.49)$ | $8.67(0.91)$ | $1.06(0.41)$ |
| T35 | $0.27(0.52)$ | $0.05(0.46)$ | $0.45(0.63)$ | $0.33(0.36)$ | $0.18(0.53)$ |
| T36 | $0.77(0.20)$ | $4.90(1.0)$ | $4.76(1.0)$ | $5.67(1.0)$ | $5.53(1.0)$ |
| T37 | $1.79(0.21)$ | $3.94(1.0)$ | $0.46(0.53)$ | $5.73(1.0)$ | $2.25(0.90)$ |

Note. Effect size was calculated using the non-overlap of all pairs (NAP), cutoffs for interpreting NAP values were taken from Parker et al 2011, 2009. A large effect is indicated by a NAP value between 0.93-1.0 (green) and a medium effect 0.66-0.92 (orange). A value less than 0.66 indicates a weak/no effect.
Discharge: 0 large effects, 4 medium effects (4 total)
Follow-up: 21 large effects, 2 medium effects ( 23 total)
No change: 3 (denoted in red)

Supplemental Table 2d. Non-overlapping Pairs (NAP) effect sizes for Pain

| Child | Pain |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | A-B | A-C | A-D | B-C | B-D |
| T1 | $1.07(0.68)$ | $6.47(1.0)$ | $6.47(1.0)$ | $5.40(1.0)$ | $5.40(1.0)$ |
| T2 | $3.52(0.97)$ | $4.51(1.0)$ | $4.51(1.0)$ | $1.00(0.83)$ | $1.00(0.83)$ |
| T5 | $0.21(0.45)$ | $0.43(0.66)$ | $2.14(0.04)$ | $0.63(0.69)$ | $1.94(0.08)$ |
| T6 | $0.33(0.63)$ | $0.97(0.85)$ | $0.90(0.84)$ | $0.64(0.78)$ | $0.57(0.82)$ |
| T7 | $0.26(0.41)$ | $1.13(0.11)$ | $0.18(0.44)$ | $0.87(0.16)$ | $0.09(0.53)$ |
| T9 | $1.04(0.68)$ | $1.57(0.82)$ | $1.43(0.76)$ | $0.53(0.62)$ | $0.39(0.57)$ |
| T10 | $0.05(0.47)$ | $1.37(0.72)$ | $1.58(0.87)$ | $1.42(0.76)$ | $1.63(0.92)$ |
| T12 | $0.81(0.64)$ | $7.71(1.0)$ | - | $6.90(1.0)$ | - |
| T13 | $0.74(0.61)$ | $0.71(0.63)$ | $0.09(0.59)$ | $0.02(0.53)$ | $0.65(0.49)$ |
| T15 | $0.66(0.22)$ | $0.40(0.71)$ | $1.03(0.93)$ | $1.06(0.84)$ | $1.69(0.97)$ |
| T17 | $1.44(0.60)$ | $6.83(1.0)$ | $3.93(0.85)$ | $5.39(0.89)$ | $2.49(0.69)$ |
| T19 | $0.26(0.47)$ | $0.04(0.59)$ | $0.43(0.46)$ | $0.22(0.63)$ | $0.17(0.48)$ |
| T20 | $2.42(0.87)$ | $4.46(1.0)$ | $1.06(0.64)$ | $2.04(0.84)$ | $1.36(0.29)$ |
| T21 | $0.37(0.59)$ | $2.06(0.95)$ | $1.45(0.80)$ | $1.69(1.0)$ | $1.08(0.81)$ |
| T22 | $0.23(0.46)$ | $0.55(0.65)$ | $0.57(0.68)$ | $0.78(0.68)$ | $0.81(0.69)$ |
| T23 | $0.36(0.21)$ | $0.48(0.64)$ | $0.93(0.64)$ | $0.84(0.84)$ | $1.29(0.76)$ |
| T24 | $0.29(0.68)$ | $5.36(1.0)$ | $7.88(1.0)$ | $5.07(1.0)$ | $7.59(1.0)$ |
| T25 | $0.28(0.56)$ | $4.89(1.0)$ | $4.00(1.0)$ | $4.58(0.99)$ | $3.72(0.93)$ |
| T27 | $1.24(0.72)$ | $0.05(0.50)$ | $0.12(0.44)$ | $1.29(0.26)$ | $1.36(0.33)$ |
| T29 | $0.09(0.62)$ | $1.35(0.15)$ | $1.24(0.90)$ | $1.44(0.18)$ | $1.16(0.79)$ |
| T30 | $0.95(0.31)$ | $0.16(0.54)$ | $0.40(0.58)$ | $1.10(0.75)$ | $1.35(0.80)$ |
| T31 | $0.19(0.46)$ | $5.88(1.0)$ | $5.53(1.0)$ | $6.07(1.0)$ | $5.72(1.0)$ |
| T32 | $0.13(0.47)$ | $0.53(0.36)$ | - | $0.39(0.41)$ | - |
| T34 | $1.30(0.63)$ | $8.51(0.93)$ | $10.0(1.0)$ | $7.21(0.85)$ | $8.70(0.98)$ |
| T35 | $0.00(0.50)$ | $0.85(0.64)$ | $2.22(0.78)$ | $0.86(0.63)$ | $2.22(0.82)$ |
| T36 | $0.50(0.32)$ | $0.72(0.79)$ | $0.70(0.80)$ | $1.22(0.99)$ | $1.20(0.98)$ |
| T37 | $0.90(0.23)$ | $2.83(0.96)$ | $0.61(0.69)$ | $3.73(1.0)$ | $1.51(0.93)$ |

Note. Effect size was calculated using the non-overlap of all pairs (NAP), cutoffs for interpreting NAP values were taken from Parker et al 2011, 2009. A large effect is indicated by a NAP value between 0.93-1.0 (green) and a medium effect 0.66-0.92 (orange). A value less than 0.66 indicates a weak/no effect.
Discharge: 1 large effects, 5 medium effects ( 6 total)
Follow-up: 13 large effects, 9 medium effects ( 22 total)
No change: 4 (denoted in red)

Supplemental Table 2e. Non-overlapping Pairs (NAP) effect sizes for Acceptance/Engagement

| Child | Acceptance/Engagement |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | A-B | A-C | A-D | B-C | B-D |  |
| T1 | $1.46(0.22)$ | $7.38(1.0)$ | $7.79(1.0)$ | $8.84(1.0)$ | $8.84(1.0)$ |  |
| T2 | $1.07(0.80)$ | $1.32(0.82)$ | $1.32(0.82)$ | $0.25(0.51)$ | $0.25(0.51)$ |  |
| T5 | $0.76(0.72)$ | $2.29(0.02)$ | $0.21(0.41)$ | $1.53(0.91)$ | $0.97(0.22)$ |  |
| T6 | $0.75(0.91)$ | $0.91(1.0)$ | $1.05(1.0)$ | $0.16(0.59)$ | $0.30(0.67)$ |  |
| T7 | $0.26(0.41)$ | $0.56(0.79)$ | $0.70(0.85)$ | $0.85(0.94)$ | $0.97(1.0)$ |  |
| T9 | $0.38(0.59)$ | $0.36(0.57)$ | $0.48(0.63)$ | $0.02(0.48)$ | $0.10(0.55)$ |  |
| T10 | $0.32(0.36)$ | $0.36(0.35)$ | $2.61(1.0)$ | $0.04(0.49)$ | $2.93(1.0)$ |  |
| T12 | $1.66(0.17)$ | $0.91(0.30)$ | - | $0.76(0.73)$ | - |  |
| T13 | $0.42(0.42)$ | $3.10(1.0)$ | $3.31(1.0)$ | $3.51(1.0)$ | $3.73(1.0)$ |  |
| T15 | $0.12(0.57)$ | $1.19(0.95)$ | $1.50(0.98)$ | $1.08(0.95)$ | $1.39(0.98)$ |  |
| T17 | $1.23(0.68)$ | $0.54(0.60)$ | $2.43(0.25)$ | $0.70(0.45)$ | $3.67(0.07)$ |  |
| T19 | $0.97(0.30)$ | $0.95(0.33)$ | $0.93(0.42)$ | $0.02(0.55)$ | $0.04(0.65)$ |  |
| T20 | $1.06(0.25)$ | $2.12(1.0)$ | $1.75(1.0)$ | $3.17(0.98)$ | $2.80(0.97)$ |  |
| T21 | $0.26(0.67)$ | $1.97(0.94)$ | $2.45(1.0)$ | $1.70(0.90)$ | $2.19(1.0)$ |  |
| T22 | $1.09(0.90)$ | $1.93(1.0)$ | $3.00(1.0)$ | $0.84(0.82)$ | $1.92(1.0)$ |  |
| T23 | $0.47(0.28)$ | $3.32(1.0)$ | $4.86(1.0)$ | $3.79(1.0)$ | $5.33(1.0)$ |  |
| T24 | $0.72(0.70)$ | $2.58(0.92)$ | $3.19(1.0)$ | $1.86(0.87)$ | $2.47(0.99)$ |  |
| T25 | $0.49(0.39)$ | $4.83(1.0)$ | $4.25(1.0)$ | $5.31(1.0)$ | $4.74(1.0)$ |  |
| T27 | $0.74(0.33)$ | $0.91(0.83)$ | $0.60(0.67)$ | $1.65(0.83)$ | $1.33(0.74)$ |  |
| T29 | $1.02(0.77)$ | $0.49(0.63)$ | $2.00(0.86)$ | $0.56(0.32)$ | $0.98(0.74)$ |  |
| T30 | $0.53(0.60)$ | $1.47(0.87)$ | $0.23(0.55)$ | $0.94(0.79)$ | $0.30(0.42)$ |  |
| T31 | $1.78(0.84)$ | $6.57(1.0)$ | $3.60(1.0)$ | $4.80(1.0)$ | $1.82(0.85)$ |  |
| T32 | $0.12(0.58)$ | $1.41(0.91)$ | - | $1.29(0.96)$ | - |  |
| T34 | $2.55(0.13)$ | $4.99(0.95)$ | $3.01(0.84)$ | $7.54(0.88)$ | $5.56(0.88)$ |  |
| T35 | $0.00(0.49)$ | $0.28(0.45)$ | $0.80(0.36)$ | $0.00(0.49)$ | $0.52(0.41)$ |  |
| T36 | $1.05(0.63)$ | $4.63(1.0)$ | $4.37(1.0)$ | $3.58(0.94)$ | $1.74(0.07)$ |  |
| T37 | $0.87(0.56)$ | $2.20(0.62)$ | $2.17(0.59)$ | $1.32(0.57)$ | $1.30(0.53)$ |  |

Note. Effect size was calculated using the non-overlap of all pairs (NAP), cutoffs for interpreting NAP values were taken from Parker et al 2011, 2009. A large effect is indicated by a NAP value between 0.93-1.0 (green) and a medium effect 0.66-0.92 (orange). A value less than 0.66 indicates a weak/no effect.
Discharge: 0 large effects, 9 medium effects ( 9 total)
Follow-up: 16 large effects, 6 medium effects ( 22 total)
No change: 4 (denoted in red)


Supplementary Figure 1. Estimated regression lines based on the multilevel model for acceptance.
Individual participant trajectories are shown in color ( $N=27$ ), the overall average trajectory across participants is shown in black.


Supplementary Figure 2. Estimated regression lines based on the multilevel model for pain catastrophizing. Individual participant trajectories are shown in color ( $N=27$ ), the overall average trajectory across participants is shown in black.


Supplementary Figure 3. Estimated regression lines based on the multilevel model for pain. Individual participant trajectories are shown in color ( $N=27$ ), the overall average trajectory across participants is shown in black.

