Online counselling and goal achievement: Exploring meaningful change and the types of goals progressed by young people

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Abstract

**Background:** Young people are increasingly looking towards the internet for mental health support. There has been little research on the impact of online counselling, as captured in routine outcome measures. This research aims to explore an online counselling service, using goal-based data.

**Methods:** 'Meaningful change' drawing on the principles of the Reliable Change Index, t tests and logistic regression were applied to administration data (\(n = 4,218\)) to assess goal progress, and associations between service contact, goal type and meaningful change.

**Results:** 55.6% of young people reported meaningful goal improvement. Those who meaningfully improved spent significantly more time engaged than those who did not. Goal types most likely to meaningfully improve were 'getting professional help' and 'self-help–self-care'.

**Conclusions:** Most young people made significant movement towards their collaboratively agreed goals, which is a good indication that the service is helping to address important areas of change. The findings, linked to earlier research, may indicate that those who report improvements in goals may engage with services more. The high proportion of 'getting help' goals may be attributable to the online setting, which young people may use as a first point of contact for help seeking, to gather information to access further support. With the increased uptake of online support services associated with the current global pandemic, future research should consider the present findings as a baseline of goal progress and service utilisation.

**KEYWORDS**
goal-based outcomes, routine outcome monitoring, online counselling, young people, mental health, youth mental health
When seeking support for mental health and well-being difficulties, young people are increasingly looking towards the internet to access the help they need (Gray et al., 2005). Online counselling services have emerged as a response to this demand, and have demonstrated popularity and accessibility (Liverpool et al., 2019; Pattison et al., 2012). There has been some focus on the ‘inner workings’ of online counselling around the world, such as the ‘zone of reflection’ and ‘online disinhibition’ in the United States (Suler, 2000, 2004); issues around developing trust online (Fletcher-Tomenius & Vossler, 2009); motivations of young people in Australia to seek out this medium (Kids Helpline; King et al., 2006); a greater sense of control and comfort for the young person (Beattie et al., 2006); and the role of the therapeutic relationship (Hanley, 2012; Hanley & Reynolds, 2009). But there has been little research on the impact of online counselling as captured in Routine Outcome Measures (ROMs).

Young people seek mental health and well-being support for a variety of reasons, which may or may not include a reduction in symptoms (Cuijpers, 2019; Macpherson et al., 2016). In order to assess progress and the impact of any support provided, ROMs are commonly used across young people’s mental health and well-being settings (Child Outcomes Research Consortium [CORC], 2020). To date, the focus has been on standardised measurement, which consists of self- or proxy-reported questionnaires based on symptomatology and functioning (Wolpert et al., 2014). Emerging guidelines on the use of standardised outcome measurement are currently being discussed (Patalay & Fried, 2020; Wolpert, 2020). Whilst this type of measurement is considered useful to benchmark and to assess the effectiveness of service or team provision, evidence for the use of such measures for the evaluation of young people’s mental health and well-being services is mixed (Bergman et al., 2018). Whilst there is a body of evidence that does suggest that the considered use of standardised outcome measurement is effective with adults, particularly when feedback from the measures is incorporated into face-to-face therapy sessions (Carlier et al., 2012; Cooper et al., 2019; Lambert & Shimokawa, 2011; Lambert et al., 2018; Sapyta et al., 2005; Worthen & Lambert, 2007), the main concern about this type of measurement is the broad approach, which may underestimate change on a personal level because all items will not be relevant to everyone within the sample (Green, 2016; Lee et al., 2005).

Emerging evidence provides increased support for idiographic and client-defined types of outcome measurement, where the items are not predefined, but rather are formed in collaboration with the client and are noted down in the client’s own words. Such idiographic outcome measurement includes goal setting and tracking over time (e.g., Goal Attainment Scaling, Kiresuk & Sherman, 1968; Goal-Based Outcomes tool, Law, 2011; and Goals Form, Cooper, 2015). Goal-based measures may be used alongside usual clinical work or may be viewed as integral to a goal-focused way of working with young people (Di Malta et al., 2019; Law & Jacob, 2015). Within this context, goals are the ultimate desired state (Austin & Vancouver, 1996) and are ‘intended changes in behaviour and experience to be attained by therapy’ (Michalak & Holtforth, 2006, p. 354). Goal-based outcome measures have been used for some time in various health settings but have been more recently implemented in young people’s mental health and well-being settings. The only goal-based outcome measure evidenced as being widely used in young people’s mental health and well-being settings is the Goal-Based Outcomes tool (GBO, Law, 2011; see measures section, Lloyd et al., 2019).

Further, whilst dose–response research in young people’s mental health and well-being settings has not found conclusive evidence to support the hypothesis that more is better (Bickman et al., 2002; Kirk et al., 2019), emerging research does suggest a link between goal setting and tracking and retention in young people’s services (Cairns et al., 2019) and with increased satisfaction with care (Bradley et al., 1999; Jacob et al., 2017). This may be because goals are a central part of shared decision-making, whereby options and preferences are agreed upon in a process of collaboration between the practitioner and the client (Santana & Feeny, 2014). Goals and goal setting have a long history in the published literature, and goal striving in-and-of itself is considered to be influenced by a number of factors including motivation and locus of control (Karoly, 1993).
For example, goal theory assumes agency, whereby the outcomes of the goal (and as such, the therapeutic process) are contingent on the participation of the client, which may be dependent on the individual's perceptions and beliefs about mental health and well-being, and whether their locus of control is internal or external. For example, Mellat and Lavasani (2011) found that young people with an external locus of controls, or a belief in absolute truths, were less likely to engage in challenging tasks.

When used in clinical settings, goal-based outcome measures have been evidenced to have good face validity amongst young people (Badham, 2011; Feltham et al., 2018; Moran et al., 2012) and are useful to maintain focus and keep the progress of therapy on course (Pender et al., 2013). Young people's mental health and well-being settings have found the use of themes or categories useful when considering goal-based outcomes, where existing goal content is grouped by goal type (Bradley et al., 2013; Duncan et al., 2019; Grey et al., 2018; Odhhamar & Carlberg, 2015; Rupani et al., 2014), which may be particularly useful for service planning and training purposes (Jacob et al., submitted). Prior research on the same service that this paper draws evidence from pointed to the complexities of capturing outcomes in an online setting (Sefi & Hanley, 2012), with the follow-up study assessing the use of a developed goal-based measure (Hanley et al., 2017). This identified the acceptability of goals as a means of capturing outcomes both for practitioners and for young people alike, in an online setting, but did not evidence the achievement of goals. This prior research demonstrated that young people were more likely to set personal goals when accessing online counselling and mainly set relationship goals when accessing face-to-face counselling (Hanley et al., 2017). Because incorporating goal types into analysis of young people's clinical goal data is a fairly new approach, there is a dearth of research into whether certain goals may be attained more than others. Where research has been published, no differences have yet been found (Rupani et al., 2014), although there is some indication that there might be differences in attainment of goals. For example, adult psychotherapy clients have been shown to be more likely to achieve well-being goals compared with other types of goals (Berking et al., 2005; Elliot & Sheldon, 1997; Emmons, 1992; Kaplan et al., 2002). Further, there has been no exploration of whether goal type predicts meaningful change in goal outcome when drawing on the principles of the Reliable Change Index.

Idiographic measures have traditionally been analysed on either an individual basis with significant differences over time identified by looking across points plotted on a graph or run chart (Cohen et al., 2013; Law, 2019; Perla et al., 2011) or on an aggregate level by looking at changes in mean scores across time points (CORC, 2018; Law & Jacob, 2015). A recent development in the field is the application of the principles of the Reliable Change Index (Jacobson & Truax, 1991) to goal data (Edbrooke-Childs et al., 2015; Jacob, 2019). This explores change in goals, which is not considered to be due to random fluctuation or due to measurement error. The inception paper used the principles of reliable change to calculate a metric for the GBO of 2.45 points. This was termed ‘meaningful change’ to reflect the novel use of quantitative statistical principles to an idiographic, client-defined outcome measure (Edbrooke-Childs et al., 2015). Initial results using these principles demonstrated that more meaningful improvement was evidenced for goal-based data, compared with reliable change calculations on data from measures of symptomatology and functioning (Edbrooke-Childs et al., 2015). Research also suggests that goals may track areas of measurement which are not captured by standardised measures of outcome, particularly existential factors, which may align to functioning elements of change (Jacob et al., 2017). This sensitivity to areas of important change may be an explanation for the enhanced levels of goal-based meaningful change, compared with reliable change in other outcome measures. In England, meaningful change, drawing on the principles of the Reliable Change Index, has been adopted for trial by NHS England and NHS Improvement (NHSE&I) as part of a national outcome metric in young people’s mental health and well-being services. Based on this prior research, and through focus groups with practitioners, a conservative estimate of meaningful change, drawing on the principles of the Reliable Change Index, for young people was considered as three points on the GBO. These principles now form part of NHSE&I’s ‘measurable change’ calculation, which utilises the Reliable Change Index to calculate change for young people on a range of standardised outcome measures, which now, subsequent to the research by Edbrooke-Childs et al. (2015), also includes GBO. No results for the measurable change metric are currently publicly available. In comparison, reliable change calculated for standardised measures of symptoms and functioning for young people’s mental health and well-being settings across England, as demonstrated by analysis of data routinely collected as part of a national initiative, demonstrates that ~52% of young people have reported reliable improvement and 38% have reported no reliable change (Wolpert et al., 2016).

The aims of this paper are as follows: (a) to explore the evaluation of an online counselling service, using the first application of the meaningful change drawing on the principles of the Reliable Change Index calculation for the GBO; (b) to consider how this links to service use; and (c) to explore the associations between goal type and goal outcome.

## 2 Methods

### 2.1 Data set

The data set comprises routinely collected demographics and outcome data obtained from the Kooth service, an online counselling and support service for young people aged 11–25 years. As the research involves secondary analysis of routinely collected service evaluation data, ethical review was not required (NHS Health Research Authority, 2018). The sample consisted of 4,218 cases, with a mean age of 15.17 years. Of these, 3,487 (83%) were female and 580 (14%) were male. The majority of cases were White British (3,432; 81%), followed by any other background (192; 5%). These ethnicity characteristics are broadly in
line with the proportion of young people by ethnicity in the UK (83% White British; 3.6% Black, 2.9% Pakistani, 2.6% Mixed, 2.5% Indian and 1.9% Other ethnicity; Office of National Statistics, 2018).

2.2 | Measures

2.2.1 | GBO

The Goal-Based Outcomes tool (GBO; Law, 2011) is a collaboratively defined measure widely used in young people’s mental health and wellbeing settings. It consists of the young person, or a combination of the young person, parent or carer, and practitioner, formulating up to three goals and then rating them at regular intervals. The online version of this tool can also include idiographic goals set outside of counselling, and these are checked and discussed with the practitioner once they are engaged. The measure is scored on an 11-point scale from ‘no progress towards goal’ (0) to ‘goal achieved’ (10). The GBO was developed as a tool to ‘help facilitate collaborative goal-oriented conversations and to help track progress towards goals’ (Law, 2019). To commensurate to the service’s protocol for outcome measurement, the GBO scores in the present data set were all set to zero at the beginning of contact, to enable accurate capture of movement with the online tool.

2.2.2 | Goal themes

The goal themes were adapted from prior research, which utilised thematic analysis to analyse goals collaboratively set by young people at the onset of their contact with the present service (Hanley et al., 2017). Three overarching goal themes were derived (intrapersonal goals, interpersonal goals and intrapersonal goals directly related to others). Within these overarching themes, 28 subthemes were derived and developed to suit effective categorisation within the service, and these form the basis of the present analysis. The goal theme is selected by the practitioner, based on the content of the collaboratively agreed goal, at the outset of contact.

2.2.3 | Other service variables

Information regarding the following was also collected: time spent in service (referring to the total time period from registration of the young person to their last recorded activity); counselling time (total time in minutes spent in chats and counselling time on therapeutic messages); time spent chatting (total time in minutes spent in chats); number of chats; and average chat length (in minutes).

2.3 | Analytic strategy

To explore the goal outcome data, we conducted three analyses. First, ‘meaningful change’, drawing on the principles of the Reliable Change Index, was calculated to determine change over time. For standardised measures, the Reliable Change Index (Jacobson & Truax, 1991) calculation takes into consideration the reliability of the measure (internal consistency) and suggests change that is not attributable to measurement error alone. Due to the idiographic nature of the GBO, a change in progress towards goals of three points or more was used as a proxy of reliable change. Scores on the GBO are considered to be a representation of personally meaningful improvement in the lives of young people (Jacob, 2020). Using this analysis, traditionally, the data are calculated as either reliably improved, no reliable change or reliably deteriorated. Because all goals in this data set were scored zero at the outset, only ‘meaningful improvement’ and ‘no meaningful change’ are the feasible outcomes of this calculation for this data set.

Second, we calculated statistical differences to explore associations with those whose goals had meaningfully changed and their contact with the service. A series of Welch two-sample t tests were conducted to compare those who have meaningfully changed (n = 2,346) with those who presented no change (n = 1,872) on the following indicators: time spent in service, counselling time, time spent chatting, number of chats and average chat length. A Bonferroni-adjusted alpha of 0.01 was employed for the analysis to reduce the likelihood of type I error.

Third, we explored the association between goal theme and meaningful change, drawing on the principles of the Reliable Change Index. A logistic regression with analysis of maximum-likelihood estimates and odds ratio estimates was computed to model the relationship between predictors and the occurrence of meaningful change (with no change as the reference category). Analyses were conducted in R (version 3.6.1; R Core Team, 2019) using the glm() function of the ‘stats’ package (R Core Team, 2019). The total sample (n = 4,218) was split into a training and testing data set using the package ‘caret’ (version 6.0-84; Kuhn, 2019), with the training data set retaining 70% of the original sample (n = 2,954). The ratio of meaningful change to no change was kept consistent across the two data sets. The logistic regression model was then built on the training data set and used to predict the response on the training data set. Goal themes were added to the model as binary variables, coded as ‘goal within this theme set’ (1) versus ‘goal within this theme not set’ (0). Wald tests are reported to test the significance of the covariates in the model. A Bonferroni-adjusted alpha of 0.001 was employed for the analysis to reduce the likelihood of type I error. Ninety-nine per cent confidence intervals for odds ratio estimates were also computed.

3 | Results

Of 4,218 young people, 55.6% (n = 2,346) progressed in their goals by three points or more, thus presenting meaningful improvement. The remainder (44.4%, n = 1872) presented no meaningful change. Those who progressed were 15.39 years old on average (standard deviation = 2.72); 81.5% (n = 1913) were identified as female and 15% (n = 353) as male; and 81% (n = 1901) described themselves
as White British. Those who presented no meaningful change were 14.9 years old on average (SD = 2.5); 84.1% (n = 1574) were identified as female and 12.1% (n = 227) as male; and 81.8% (n = 1531) described themselves as White British. Figure 1 shows the proportions of young people who reported meaningful improvement or no meaningful change in the sample.

The t test results demonstrated that young people who meaningfully improved spent significantly more time in contact with the service than those who reported no meaningful change, and recorded a significantly higher counselling time than those who reported no meaningful change. Independent-samples t tests also showed that young people who meaningfully improved spent significantly more time chatting, recorded a significantly higher number of chats and recorded a significantly higher average chat length than those who presented no meaningful change. Table 1 shows the Welch t test results for these indicators.

Figure 2 shows the frequency of the 28 goal themes in the sample. The most common theme pertained to ‘getting professional help—in service’, with 34% (n = 1,420) of young people having set a goal belonging to this theme.

3.1 | Logistic regression

A logistic regression model was fitted to the data to predict meaningful change from the goal themes, controlling for gender and age. Table 2 shows the coefficients, standard errors, Wald statistics and odds ratios estimates with 99% confidence intervals for the logistic regression model in the training data set (n = 2,954). Results show that young people setting goals in the following themes were more likely to meaningfully improve: getting professional help—in service (OR = 5.68, p < .001), getting professional help—outside the service (OR = 4.17, p < .001), bullying (OR = 3.88, p < .001), challenging own behaviour (OR = 3.51, p < .001), emotional exploration (OR = 3.32, p < .001), career/aspiration (OR = 2.88, p < .001), suicidal thoughts (OR = 2.54 p < .001), school/college/training (OR = 2.45, p < .001), self-help-self-care (OR = 2.16, p < .001), self-help—skills for life (OR = 2.10, p < .001), emotional regulation (OR = 1.96, p < .001), feeling happier (OR = 1.87, p < .001) and overcoming anxiety (OR = 1.84, p < .001).

4 | DISCUSSION

The aims of this research were to explore the evaluation of an online counselling service, using the first application of meaningful change, drawing on the principles of the Reliable Change Index (Jacobson & Truax, 1991) to GBO data, to consider how this links to service use and to explore the associations between goal type and goal outcome. This is the first research to use the meaningful change analysis technique to evaluate mental health and well-being service provision for young people. We also present consideration of how improvement using meaningful change, drawing on the principles of the Reliable Change Index, is associated with service use and goal theme. In summary, the findings suggest that for this young people’s online counselling service, the majority (55.6%) of young people reported meaningful improvement on the GBO and males in contact with the service reported slightly more meaningful improvement (60.6%) than females (54.9%). Young people who reported meaningful improvement spent more time engaging with the service than those who reported no meaningful change. Further, young people working towards certain types of goals were more likely to report meaningful improvement than those working towards other types of goals.

The results suggest that most young people in contact with the service have made significant movement towards their collaboratively agreed goals. This is an indication that the service is helping young people address areas of change that are important to them, through striving towards their goals. These findings demonstrate a

Figure 1 | Proportions and confidence intervals of young people who have meaningfully improved or presented no meaningful change.
similar amount of meaningful change, drawing on the principles of the Reliable Change Index, reported for the GBO compared to a national analysis of standardised symptom and functioning outcome measures (52%), with more young people in the present research demonstrating no meaningful change (44% compared to 38%; Wolpert et al., 2016). To date, there is no comparable published outcome information relating to other online counselling services, nor are there other published meaningful change, drawing on the principles of the Reliable Change Index, findings for collaboratively agreed goal-based outcome measures using the same calculation. Future work should consider results from different perspectives, because the earlier, similar analysis of parent-rated goals found 77% of goals improved; however, there were other differences in that analysis, as discussed. Future work should strive to explore meaningful change, drawing on the principles of the Reliable Change Index, from a range of perspectives and in a range of service settings.

Further, the results also indicate that young people who reported meaningful improvement demonstrated more engagement with associated activities in the service, including time overall, counselling time and chat time. These findings may seem intuitive, that with more input, young people are more likely to report meaningful improvement. However, we cannot infer causality from these results. Additionally, dose–response research in young people’s mental health and well-being settings has demonstrated mixed results, with little research demonstrating a positive association (Bickman et al., 2002; Kirk et al., 2019). Previous research suggests that goals are motivating and that moving in a positive direction has a circular effect, whereby positive movement increases
self-efficacy and thus further motivation towards achieving goals (Karoly, 1993; Maslow, 1989). Further, links between goal use and retention have been demonstrated (Cairns et al., 2019), although retention in digital methods of mental health support is reported as high anyway (79%; Liverpool et al., 2019). The present findings linked to earlier research may indicate that those who see early improvements in goals may engage with services more; further work should explore this.

Overall in the service, the goals that were most commonly set by young people were related to ‘getting professional help—in service’, ‘self-help–self-care’, ‘emotional exploration’ and ‘emotional regulation’. This indicates the most frequent reasons for young people accessing the service. This partly aligns to previous research utilising a similar data set from the same service, which found that goals set as part of online counselling were more likely to be related to personal growth but that face-to-face goals were more likely to align to emotional

| TABLE 2 | Logistic regression model coefficients and odds ratio estimates predicting meaningful change with goal theme |
|---------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Maximum-likelihood estimates               | B (SE) | Wald $\chi^2$ | Odds ratio estimates [99% CI] | $p > \chi^2$ |
| Intercept                                  | -2.01 (0.26) | -7.66 | 0.13 [0.07, 0.26] | <0.001 |
| **Goal themes (base = not set)**           |                      |                          |                          |               |
| Anger                                      | 0.19 (0.38) | 0.50 | 1.21 [0.45, 3.20] | 0.617 |
| Assertiveness                              | 1.04 (0.61) | 1.71 | 2.84 [0.61, 15.57] | 0.087 |
| Bullying                                   | 1.36 (0.35) | 3.90 | 3.88 [1.62, 9.91] | <0.001 |
| Career/aspiration                          | 1.06 (0.26) | 4.10 | 2.88 [1.48, 5.63] | <0.001 |
| Challenging own behaviour                  | 1.26 (0.33) | 3.84 | 3.51 [0.54, 8.44] | <0.001 |
| Challenging thoughts                       | 0.43 (0.19) | 2.25 | 1.53 [0.94, 2.52] | 0.024 |
| Confidence/self-acceptance                 | 0.09 (0.17) | 0.53 | 1.09 [0.71, 1.68] | 0.596 |
| Eating issues                              | 0.59 (0.31) | 1.91 | 1.81 [0.81, 4.07] | 0.056 |
| Emotional exploration                      | 1.20 (0.12) | 10.38 | 3.32 [2.47, 4.49] | <0.001 |
| Emotional regulation                       | 0.68 (0.15) | 4.50 | 1.96 [1.34, 2.90] | <0.001 |
| Enjoying self                              | 0.05 (0.29) | 0.17 | 1.05 [0.50, 2.20] | 0.866 |
| Family relationships                        | 0.92 (0.27) | 3.39 | 2.51 [0.26, 5.14] | 0.001 |
| Feeling happier                            | 0.62 (0.17) | 3.62 | 1.87 [0.20, 2.92] | <0.001 |
| Friendships                                | 0.60 (0.19) | 3.17 | 1.82 [0.12, 2.96] | 0.002 |
| Getting more help from significant others   | 0.49 (0.25) | 1.92 | 1.63 [0.85, 3.16] | 0.055 |
| Getting professional help—in service       | 1.74 (0.10) | 17.22 | 5.68 [4.39, 7.39] | <0.001 |
| Getting professional help—outside service  | 1.43 (0.24) | 5.99 | 4.17 [2.30, 7.91] | <0.001 |
| Grief                                      | 1.51 (0.48) | 3.17 | 4.53 [0.41, 17.40] | 0.002 |
| Managing depression or low mood            | 0.90 (0.26) | 3.48 | 2.45 [0.28, 4.85] | 0.001 |
| Overcoming anxiety                          | 0.61 (0.15) | 4.11 | 1.84 [1.26, 2.71] | <0.001 |
| School/college/training                    | 0.89 (0.20) | 4.49 | 2.45 [1.47, 4.11] | <0.001 |
| Self-exploration                           | 0.59 (0.18) | 3.32 | 1.81 [0.14, 2.88] | 0.001 |
| Self-harm                                  | 0.56 (0.17) | 3.23 | 1.75 [0.12, 2.75] | 0.001 |
| Self-help—self-care                        | 0.77 (0.11) | 6.74 | 2.16 [1.61, 2.90] | <0.001 |
| Self-help—skills for life                  | 0.74 (0.16) | 4.52 | 2.10 [1.38, 3.21] | <0.001 |
| Sleep issues                               | 1.33 (0.39) | 3.39 | 3.78 [0.43, 11.08] | 0.001 |
| Speaking up - communicating better         | 0.58 (0.26) | 2.22 | 1.78 [0.92, 3.51] | 0.027 |
| Suicidal thoughts                          | 0.93 (0.26) | 3.56 | 2.54 [0.31, 5.06] | <0.001 |
| **Gender (base = female)**                 |                      |                          |                          |               |
| Agender                                    | 0.12 (0.40) | 0.29 | 1.12 [0.40, 3.19] | 0.772 |
| Gender fluid                               | -0.49 (0.27) | -1.77 | 0.62 [0.30, 1.23] | 0.076 |
| Male                                       | 0.31 (0.13) | 2.50 | 1.37 [0.99, 1.89] | 0.012 |
| Age                                        | 0.04 (0.02) | 2.30 | 1.04 [1.00, 1.08] | 0.021 |

Note: B, regression coefficient; CI, confidence interval; SE, standard error; significant predictors in bold.
well-being (Hanley et al., 2017). The high proportion of ‘getting help’ goals may be attributable to the online setting, which young people may use as a first point of contact for help seeking (Gray et al., 2005) as a means to gather information to allow them to access further support (Hanley et al., 2017). Further to this, some goals were more likely to be reported as meaningfully improved at the follow-up time point than others. The goals that were most likely to see meaningful improvement were related to ‘getting professional help both within and outside of the service’ and ‘self-help-self-care’. This may suggest that one of the most helpful sources of support offered by the online counselling service is to give or advise young people on getting both professional help, and to assist with self-care. These findings may speak to the mindset of young people seeking online input with regard to mental health and well-being, where they have specific and immediate reasons for using the service. In contrast, analysis of young people’s goals in face-to-face mental health and well-being settings revealed that ‘letting people know the help I need’ was a theme attributed to less than 1% of the sample (Bradley et al., 2013). Aside from these themes, goals that were most likely to be reported as meaningfully improved were also from the ‘emotional exploration’ theme. This does not align to the adult literature, which suggests that well-being goals were more likely to be achieved compared with other types of goals (Berking et al., 2005). This, however, may be due to differing foci of support, where the existing service offers enhanced support to young people seeking support for these difficulties. It also suggests the nature of effective support with adolescents is centred more around their needs to explore themselves and their feelings, and less about functioning in the world.

In summary, we have reported the findings of an online counselling service, through the analysis of goal-based outcomes at an aggregate, or service, level. This novel application of the principles of the Reliable Change Index provides some insight into how idiographic measures may be used at this level of analysis. Through analysing the data in this way, an indication of overall progress is given, towards outcomes that are of importance to young people, and the current findings suggest that around half of young people reported meaningful change in this area. These findings are broadly in line with previous results demonstrated on standardised measures (Wolpert et al., 2016) but not in line with similar analysis on parent-rated goals. Our analysis of the GBO data provides further insight into how young people are utilising online counselling and support services, where there are links between more engagement and meaningfully improved goals. Finally, the findings may also suggest that the online setting is perceived as an important first point of contact for help seeking as a means to gather information to allow young people to access further support as required. In the climate of the current global COVID-19 pandemic, with the anticipated increase in mental health difficulties (Cortina et al., 2020; Fegert et al., 2020; Liu et al., 2020), and increased uptake of online mental health and well-being support services (Cortina et al., 2020), further research should consider the present findings as a baseline of online support in terms of goal progress and of how young people utilised these services previously.

### 5 | STRENGTHS AND LIMITATIONS

First, this research explores the first application of the principles of the Reliable Change Index to goal data, which moves forward the field of idiographic outcome measurement. However, the application of the principles of the Reliable Change Index, which includes the exploration of the internal consistency of goal data, is a novel analysis technique originally developed for standardised measurement. This may mean that there are unknown consequences of applying it to idiographic measures. Further, it is important to note that the original calculation of meaningful change, drawing on the principles of the Reliable Change Index, was based on parent-reported data and on an aggregate summary of goal change scores. The current approach utilised single goal scores and collaboratively agreed goal data. Because of these factors, the findings should be treated with caution and further work to test the application of the principles of the Reliable Change Index and other psychometric analysis techniques, such as internal consistency, to goal-based measures is warranted. The use of both idiographic and standardised measures alongside each other is recommended (Alves et al., 2018; Edbrooke-Childs et al., 2015; Green, 2016; Wolpert et al., 2014). Second, a strength of the research is the large data set that was available for analysis, which includes both goal content and change scores alongside demographic information. However, due to the nature of secondary administrative data sets, there was a high proportion of missing data and the ethnicity of the sample used was primarily White British. This limits the wider generalisability of the inferential analysis related to the most commonly achieved goals. Literature suggests that ethnicity affects the reporting of mental health difficulties and progress (Zane et al., 2005) and White British young people have been demonstrated to be three times more likely to report mental health difficulties (Sadler et al., 2018). Further research should explore goal use and achievement across ethnicities. Third, the goals recorded are a truncated representation of the goals that are grounded within the wider context and experience of the young people. This further limits the interpretation and understanding of the findings. However, the advice is to continue to use imperfect measures, in all their forms, and to explore the data from these measures in a careful and considered way (‘MINDFUL’; Wolpert et al., 2014).

### 6 | Sample

| Gender       | N   | %   |
|--------------|-----|-----|
| Female       | 1914| 81  |
| Male         | 355 | 15  |
| Gender fluid | 54  | 2   |
| Agender      | 26  | 1   |
| Ethnicity    |     |     |
| British      | 1904| 81.1|
| Any other background | 119 | 5.1 |
| Indian       | 41  | 1.7 |
Ethnicity

| Ethnicity                        | N  | %  |
|---------------------------------|----|----|
| Not stated                       | 40 | 1.7|
| Pakistani                        | 40 | 1.7|
| White and Asian                  | 35 | 1.5|
| Irish                            | 29 | 1.2|
| Any other Asian background       | 28 | 1.2|
| African                          | 26 | 1.1|
| White and Black Caribbean        | 23 | 1.0|
| Caribbean                        | 22 | 0.9|
| Bangladeshi                      | 13 | 0.6|
| Any other ethnic group           | 11 | 0.5|
| White and Black African          | 11 | 0.5|
| Chinese                          | 7  | 0.3|

Heard about

| Heard about       | N  | %  |
|-------------------|----|----|
| School            | 948| 40.4|
| School or teacher | 279| 11.9|
| GP                | 226| 9.6 |
| Friend            | 212| 9.0 |
| Internet          | 154| 6.6 |
| CAMHS             | 131| 5.6 |
| Other             | 126| 5.4 |
| Parent            | 68 | 2.9 |
| Youth service     | 29 | 1.2 |
| Instagram         | 26 | 1.1 |
| Other worker      | 26 | 1.1 |
| Social worker     | 22 | 0.9 |
| A&E               | 17 | 0.7 |
| Youth service     | 15 | 0.6 |
| Psychiatrist      | 13 | 0.6 |
| NCS               | 11 | 0.5 |
| Social worker     | 10 | 0.4 |
| Parent or carer   | 9  | 0.4 |
| Carer             | 8  | 0.3 |
| Community psychiatric nurse | 7 | 0.3 |
| Reprezent         | 5  | 0.2 |
| Youth offending team | 4 | 0.2 |
| Connexions        | 3  | 0.1 |
| More than mentors | 0  | 0  |

CONFLICTS OF INTEREST

Aaron Sefi helped to develop the goal-based outcome measure used in the online service in his role at XenZone. Jenna Jacob has produced guidance on the Goals and Goal-based Outcomes tool (GBO). Jenna Jacob, Luís Costa da Silva and Julian Edbrooke-Childs currently work as part of CORC, which encourages the use of idio- graphic goal-based outcome measures.

AUTHOR CONTRIBUTIONS

All authors jointly conceived of the idea for the study. J.J. led the study, contributed to analysis decisions and prepared the manuscript. L.C.S. conducted the data analysis and contributed to the manuscript. A.S. collated the data set, contributed to analysis decisions and contributed to the manuscript. J. E-C. led the analysis decisions and contributed to the manuscript.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from XenZone. Restrictions apply to the availability of these data, which were used under licence for this study. Access to these data can be requested at: xenzone.com/dataaccessrequest.

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Jenna Jacob, PhD, is a Research Lead at the Child Outcomes Research Consortium (CORC). The CORC team provides support to individuals and organisations across the mental health and education sectors, helping to collect and improve the quality of their outcome data and use this as evidence in their pursuit of more effective child-centred support, services and systems. Jenna’s research focuses on patient-centred care and outcome measurement, with a particular interest in goal setting and tracking in therapeutic settings. Jenna is interested in the direct application of research to positively impact the lives of young people with mental health and well-being difficulties.

Luís Costa da Silva is a Research Associate at the Child Outcomes Research Consortium (CORC). CORC aims to collect and use outcome data to evidence effective support and services of children and young people’s mental health. Luís’ PhD thesis focused on the measurement and the dimensional conceptualisation of maladaptive personality related to experiences in close relationships. Luís has keen interest in the mental health outcomes of young people, with a particular focus on outcome measurement and psychometrics, aiming for his research to have an impact on meaningful and reliable ways to measure these outcomes.

Aaron Sefi is a Chief Research and Insights Officer at Kooth Plc. Kooth is an innovator and leading platform for digital mental health, providing a welcoming space for effective personalised digital mental health care, available to all. Aaron is responsible for developing the evidence base and building research priorities to ensure our approach to digital mental health is robust and of the highest quality. Aaron is driven by aligning user needs and wants with an evidence base to ensure meaningful and valuable research and data is shared, understood and implemented.

Julian Edbrooke-Childs, PhD, is an Associated Professor in Evidence Based Child and Adolescent Mental Health at Clinical, Educational and Health Psychology, University College London (UCL) and Deputy Director of the Evidence Based Practice Unit, UCL & Anna Freud National Centre for Children and Families. His research focuses on empowering young people to actively manage their mental health and mental health care, with a particular focus on social inequalities.

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