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Responsiveness and Predictive Validity of the Self-Identified Goals Assessment

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Abstract

This study examined the responsiveness and predictive validity of the Self-Identified Goals Assessment (SIGA), which was designed to be used by occupational therapists in subacute rehabilitation and nursing homes. The SIGA is an assessment that assists patients in identifying meaningful goals and allows the patient to rate their goals on a scale of 0 to 10. The sample used for data analysis consisted of 3 males and 18 females with a mean age of 77.0 ($SD = 11.3$). The research design involved a three-step process: (a) postadmission administration of the SIGA, (b) predischarge administration of the SIGA, and (c) postdischarge administration of the SIGA with a follow-up interview. The mean gain from postadmission to predischarge was 4.5 ($SD = 1.5$), which was statistically significant, $t = 13.78, p < .0001$. The effect size for the gain was very large, indicating SIGA responsiveness. In terms of predictive validity, the predischarge overall SIGA score and time of help required in the home were not significantly correlated ($r = -.41, p = .06$), and there was no significant correlation ($r = .23, p = .31$) between the predischarge overall SIGA score and the postdischarge SIGA in-home score. However, this study found that two specific predischarge SIGA goals were statistically predictive of corresponding in-home scores. SIGA scores for overall ability declined significantly from predischarge ($M = 9.1, SD = 1.3$) to postdischarge in the home ($M = 7.1, SD = 1.8$). The results of this study provide evidence that the SIGA was responsive to the changes made throughout the in-patient stay. Evidence for predictive validity from predischarge to home was not strong; patients’ predischarge perceptions of function may change once the patient is in the home environment.
Responsiveness and Predictive Validity of the Self-Identified Goals Assessment

Client-centered practice has been defined as “an approach to service which embraces a philosophy of respect for, and partnership with, people receiving services” (Law, Baptiste, and Mills, 1995, p. 253). As of late, the client-centered approach has become more accepted and advocated among professionals. Principle 3 of the Occupational Therapy Code of Ethics states, “Occupational therapy personnel shall collaborate with recipients, and if they desire, families, significant others, and/or caregivers in setting goals and priorities throughout the intervention process.” (American Occupational Therapy Association, 2005, p. 3). Collaboration between therapist and client will enhance the therapy process. Gagne and Hoppes (2003) discussed the benefits of using a client-centered approach during an initial assessment: “This enables the therapist to structure treatment to facilitate meeting goals as well as allowing the client to focus on goals and activities he or she finds meaningful and purposeful” (p. 215).

Discussing the Conceptual Framework for Therapeutic Occupation (CFTO), Nelson and Thomas (2003) described the importance of collaboration between the occupational therapist and client during the initial assessment and treatment. The collaboration process of occupational synthesis of occupational forms allows the client and therapist to identify what is meaningful and purposeful to the client. According to CFTO, there are two types of successes: personal and sociocultural. Personal success occurs when the client’s occupational performance and impact match the client’s purpose. Sociocultural success occurs when the client’s occupational performance and impact match the norms of society. Personal and sociocultural success can occur together or separately. It is important for the therapist to observe the successes and failures of the client through a client-centered approach. This approach will allow the therapist to gain insight about the client’s meanings and purposes in regards to the two types of success.
The therapist must use effective communication skills and welcome the attitudes of the client for
the therapeutic process to be successful.

Mew and Fossey (1996) wrote that a client-centered, collaborative approach is essential
to occupational therapy because it encourages the growth of rapport between the therapist and
client, allows the therapist to understand the client’s perspective, and aids meaningful
occupations. Individualized client goal-setting must be introduced when developing client-
centered occupational therapy. Pollock (1993) suggested that a client-centered process will
increase the probability of the client engaging actively in therapy.

The Canadian Occupation Performance Measure (COPM) (Law, Baptiste, McColl,
Opzoomer, Polatajko, & Pollock, 1990) is “an outcome measure for use by occupational
therapists to assess client outcome in the areas of self care, productivity and leisure” (p. 83). The
COPM allows the therapist to use a client-centered approach by establishing goals based on the
perceptions of the client. Administration is based on a five step process: problem definition,
problem weighting, scoring, re-assessment, and follow-up by using a semi-structured interview.
The client identifies and rates occupations he or she desire to perform or those causing
difficulties. The therapist addresses these areas in the intervention. Engaging the client in rating
his or her occupational performance will encourage the client to feel responsible for his or her
therapy in hopes to reach the highest functional outcome.

The COPM has been tested for reliability and validity. Law et al. (2005) reviewed three
reliability studies, and in each case the ICC was .80. Studies cited in the COPM manual report
that test-retest reliability using inter-class correlation coefficients was .63 for Performance and
.84 for Satisfaction (Law et al., 1998). Additionally, Law and Stewart (1996) found test-retest
reliability to be ICC of .79 for Performance and ICC of .75 for Satisfaction in a sample of parents.
of young children with disabilities (as cited in Law et al., 1998). McColl, Paterson, Davies, Doubt, and Law (2000) examined the construct validity of the COPM through interviews with clients and found participants evaluated the COPM highly. Toomy, Nicholson, and Carswell (1995) investigated the clinical utility of the COPM and found that most therapists thought the COPM was valuable and a worthwhile contribution to the assessment and intervention process of occupational therapy. However, some therapists viewed the tool as time-consuming and difficult to administer.

The COPM has been shown to be responsive to change \( (p < .001) \) in the performance and satisfaction areas (Law et al., 1994). Wressle, Samuelsson, and Henriksson (1999) also investigated responsiveness and found 79 of 108 patients had change scores of two or more on the COPM from postadmission to predischarge. In a study that investigated the impact of a 3-month program of children with spastic hemiplegic cerebral palsy used the COPM and Goal Attainment Scale (GAS) to explore the impact of intervention (Cusick, McIntyre, Novak, Lannin, & Lowe, 2006). It was found that the instruments were sensitive to within-group change and detected significant between-group change. In a study investigating the validity of the COPM with participants of a posttraumatic stress program, Harper, Stalker, and Templeton (2006) found the assessment to be sensitive to change when comparing self-ratings at admission to ratings at discharge and follow-up points.

Another assessment eliciting client goals is the Self-Identified Goals Assessment (SIGA). The SIGA was developed as an assessment to be used in subacute rehabilitation and nursing homes. The assessment was “designed to help patients identify meaningful goals for therapy and make judgments about progress toward those goals” (Melville, Baltic, Bettcher, & Nelson, 2002, p. 650). A structured interview is used by the occupational therapist to elicit one to five self-
identified goals. After the goals have been identified, the client will rate each therapy goal on a 0 to 10 point scale and also rate overall level of function.

Melville et al. (2002) looked at several aspects of content and construct validity of the SIGA. Within 48 hours of completing the SIGA, 29 out of 30 subjects recalled making the goals and felt the SIGA represented their goals. During the discharge interview, 26 out of 30 subjects stated their scores indicated progress from admission to discharge. Hodge (1999) conducted focus groups of occupational therapists and concluded that the SIGA increased client-therapist communication and rapport, enhanced client motivation, and increased feelings of control in therapy. Cassidy (2000) found similar results, in that the therapist believed clients had an increase of control in therapy and were more self-confident. Overall, the SIGA was an effective tool to identify goals. Irwin (2003) and Eason (2005) investigated the correlation between the MMSE and the number of goals identified and rated on the COPM and SIGA. Irwin (2003) found that scores below 23 of 30 possible on the MMSE was the sensitive cut-off level for the SIGA. The cut-off score represents the level of cognition needed in order to successfully complete the SIGA and/or COPM assessment. Eason (2005) was unable to determine the cut-off level because there were few participants who were unable to identify or rate their goals. Both studies found significant positive Spearman correlations between the MMSE score and the number of goals identified on the COPM, number of goals rated on the COPM, number of goals identified on the SIGA, and number of goals rated on the SIGA.

A clinical measurement should be tested for responsiveness and predictive validity. Testa and Nackley (1994) stated that responsiveness is “the ability to detect meaningful treatment effects” (p. 536) in order to be clinically useful. Responsiveness is defined as the ability of an assessment to detect accurate change when it has occurred and is quantifiable by a
statistical or numeric score, such as an effect size statistic (Wright and Young, 1997). An assessment must be responsive to change, especially when looking at outcome measures. Responsiveness is important when therapists are determining if a treatment session elicited changes in an individual.

Predictive validity pertains to the foretelling of an expected outcome. As stated by Crocker and Algina (1986), “Predictive validity refers to the degree to which test scores predict criterion measurements that will be made at some point in the future” (p. 224). Measuring predictive validity in an assessment allows the therapist to make inferences in regards to a performance criterion.

As suggested for future research by Melville et al. (2002), the following study investigated the following properties of the SIGA: (a) responsiveness in measuring change from admission to discharge and (b) predictive validity of discharge SIGA scores in term of care giving time, function, and in-home SIGA scores after discharge in the home.

Method

Participants

Research participants were from the skilled nursing unit at Firelands Regional Medical Center in Sandusky, Ohio, the name of which was changed to the Great Lakes Transitional Care Center over the course of this study. Two licensed occupational therapists recruited and enrolled participants during the routine occupational therapy assessments. Over the course of the study, 80 residents who otherwise met the inclusion criteria refused to participate. These individuals refused to participate for a variety of reasons: expressed anxiety when asked to participate, did not want a visit to the home, did not want a phone call at home, or did not “feel up to” participating. However, 31 agreed to participate, and 29 of the participants met the following
Responsiveness and Predictive Validity

Inclusion criteria: current recipient of occupational therapy services, 50 years of age or older, voluntary consent to participate in the study, voluntary consent to release necessary medical records (age, gender, primary diagnosis), plan for discharge to either a private residence (home, relative’s or friend’s home, or assisted living facility), and minimum stay of seven days in the skilled nursing unit.

Of the 29 initial participants, 8 completed only the initial SIGA and were unable to complete the other components of the study. Two participants expired, one was discharged to Hospice, one was discharged prior to day seven, two were discharged back to acute care, and two were discharged without prior notice to the therapist. The sample used for data analysis consisted of 3 males and 18 females ($N = 21$) with a mean age of 77.0 ($SD = 11.3$). The primary diagnoses of the participants were as follows: hip fracture, total knee replacement, total knee arthroplasty, pneumonia, cancer, cerebral vascular accident, coronary artery bypass graft, congestive heart failure, peripheral vascular disease, and cellulitis.

Instrument Section

The Self-Identified Goals Assessment protocol is available on the World Wide Web (Melville et al., 2001). After asking about prior functioning, home situation, life work, interests, and routines, the therapist asked the participant to identify occupations “you would like to work on or improve on in therapy before you go home.” The therapist then used interviewing skills to elicit one to five goals, as possible. If the participant had difficulty identifying specific goals, the therapist would inquire about prior routines and “things that seem difficult to you now.” If the participant identified goals of improving strength, balance, or any other component ability, the therapist would ask, “What will the increased [ability] help you to do in everyday life?” If the participant reported a desire to walk, the therapist asked about the participant’s destinations and...
related routines/tasks. The therapist did not judge the participant’s goals based on significance or reasonableness and recorded whatever the person stated.

Next the therapist asked: “How well can you do all of the things you want to do on a scale from 0 to 10, with 0 being that you can’t do them at all and with 10 being you can do them your very best.” The therapist showed the participant a form depicting the 0-to-10 scale in large print, with smiling and unsmiling faces as anchors to help participants interpret the meaning of the two ends of the scale. Further explanation was given if the participant did not understand. If a participant reported a fraction (e.g., “2 1/2”) or more than one score per goal (e.g., “between a 2 or 3”), the therapist asked the participant to pick a single number. Lastly, the therapist asked the participant to rate each identified goal on the same 0-to-10 scale. The overall scores reported by the participants were used primarily in this study, and the individual scores reported by the participants were used secondarily.

Procedure

Data collection took place between October 2006 and February 2008. The research design involved a three-step process: (a) postadmission administration of the SIGA, (b) predischarge administration of the SIGA, and (c) postdischarge administration of the SIGA with a follow-up interview schedule. The postadmission and predischarge administrations of the SIGA were administered by the participant’s regular occupational therapist (Acord or Brown), and the postdischarge administration with follow-up interview was administered by the student investigator who was masked to the previously collected scores.

After informed consent, the occupational therapist gathered the following information about the participant: primary diagnosis, age, anticipated discharge site, and gender. The SIGA was then administered after the initial occupational therapy assessment was given. During the
postadmission administering of the SIGA, the therapist followed the Self-Identified Goals Assessment (SIGA) Protocol (Melville & Nelson, 2001). At predischarge (the day of or day prior to discharge), the therapist administered the SIGA again, following the SIGA protocol. The therapist gathered postdischarge plans from the participant (i.e., telephone number and contact information). This information was given to the student investigator in order to complete the postdischarge administration of the SIGA and the follow-up interview. The student investigator was masked to the postadmission and predischarge SIGA scores of the participant. The student investigator interviewed the participant within 3 to 14 days after discharge.

The original plan was to complete the postdischarge administration of the SIGA and follow-up interview by the student investigator at the participant’s residence. However, residents otherwise meeting the research criteria in the first two months of the study frequently declined to participate with some stating that they did not want a home visit. Therefore, only one participant was interviewed in the home, and all remaining participants were interviewed by telephone.

In addition to re-administering the SIGA, the student investigator asked the participant the following questions during the postdischarge follow-up interview: a) “How much help [in time] did you receive yesterday with your everyday tasks?” b) How much help [in time] did you receive the day before yesterday with your everyday tasks? c) “How much help [in time] did you receive two days before yesterday with your everyday tasks?” The student investigator talked directly with the participant by telephone, and, in accordance with the research plan, some participants, discussed help time with family member or caregiver before reporting the answer. The final score for help time needed was determined by calculating the mean duration across the three days.
Plan for Data Analysis

The data involved in the analysis of responsiveness was gathered from the postadmission and predischarge SIGA scores. To analyze predictive validity, the predischarge SIGA scores were studied in relationship to the postdischarge SIGA scores and the duration of help time needed for everyday occupations.

Responsiveness of the SIGA from postadmission to predischarge was assessed in three ways: the $t$ test for related measures (postadmission vs. predischarge scores); the effect size for the $t$ test for related measures as calculated by Cohen (1988, p. 48); and the effect size recommended for testing responsiveness by Stratford, Binkley, and Riddle (1996). The effect size by Cohen was calculated by the change score divided by its standard deviation, divided by the square root of the difference between 1 and the correlation between the admission score and the discharge score (Cohen, 1988, p. 48). Cohen argued that .80 is a large effect, .50 is a moderate effect, and .20 is a small effect. Stratford et al. (1996) took a more conservative approach to calculating the effect size as the change score divided by the standard deviation of the admission score. This approach does not take into consideration the correlation between the admission and discharge measures.

For predictive validity, the Spearman rank ordered correlation was used between the SIGA overall score at predischarge and a) the mean duration of help needed per day for everyday occupations and b) the overall SIGA score in the home. Scores of specific SIGA goals were also studied for correlations between predischarge and home.

Planned secondary analyses involved a) the responsiveness of scores in individual SIGA scores, and b) the correlation between SIGA postadmission scores and predischarge scores to gather information about the stability of the SIGA. All hypotheses were tested at alpha = .05.
Results

Figure 1 provides a summary of the amount of time between the postadmission, predischarge, and postdischarge SIGA scores, along with the mean overall SIGA scores at those specific times. The mean time that the 21 participants remained in the skilled nursing unit from postadmission SIGA to predischarge SIGA was 22.8 days (SD = 13), whereas the mean time between predischarge SIGA and postdischarge SIGA was 5.4 days (SD = 1.5).

Responsiveness

Table 1 contains the postadmission and predischarge SIGA scores as well as the gains between the two scores. The 21 participants’ mean overall rating of how well they could do all the things they wanted to do was 4.6 (SD = 1.9) at postadmission, whereas the mean predischarge score was 9.1 (SD = 1.3). The mean gain from postadmission to predischarge was 4.5 (SD = 1.5). The gain was statistically significant, \( t = 13.78, p < .0001 \). The effect size for the gain scores was calculated as described by Cohen (1998) and resulted in a very large effect at 5.0. Calculating the effect size as described by Stratford et al. (1996) resulted in an effect size of 2.4, which is still a very large effect. This calculation was lower than in Cohen’s method because it did not take into account the correlation between postadmission and predischarge scores (\( r = .64, p = .002 \)).

Other analyses involved the differences between individual goal scores at postadmission and predischarge. Table 1 provides a summary of the five SIGA goal scores at postadmission and predischarge along with the effect sizes. The first four SIGA goals were highly responsive to change from postadmission to predischarge with very large effect sizes (the fifth goal was not analyzed because only two participants had five goals).
Predictive Validity

Table 2 provides a summary of the Spearman correlation coefficients between the overall predischarge SIGA and three variables: help time needed post discharge, overall postdischarge SIGA, and postdischarge SIGA goals 1-3. The predischarge overall SIGA score and time of help required in the home were not significantly correlated ($r = -.41$, $p = .06$, $n = 21$). The correlation is negative in that high levels of ability are associated with low levels of assistance, and visa versa. Also, there was no significant correlation ($r = .23$, $p = .31$, $n = 21$), between the predischarge overall SIGA score and the postdischarge SIGA in-home score. However, there was a statistically significant positive correlation between predischarge SIGA goal two and postdischarge SIGA goal two ($r = .55$, $p = .01$, $n = 21$). There was also a statistically significant positive correlation between predischarge SIGA goal three and postdischarge SIGA goal three ($r = .51$, $p = .02$, $n = 20$).

Other Analyses

There was a statistically significant correlation between postdischarge SIGA scores and duration of assistance by others postdischarge ($r = -.53$, $p = .01$). SIGA scores for overall ability declined significantly from predischarge ($M = 9.1$, $SD = 1.3$) to postdischarge in the home ($M = 7.1$, $SD = 1.8$). Despite this decline after discharge, postdischarge SIGA scores were still significantly greater than postadmission scores.

Discussion

This study examined the responsiveness and predictive validity of the Self-Identified Goals Assessment as used in a skilled nursing facility. In the small sample studied, the SIGA was found to be highly responsive to change from postadmission to predischarge in the skilled nursing facility.
Wressle, Samuelsson, and Henriksson (1999) found the Canadian Occupation Performance Measure to be responsive from postadmission to predischarge. This study found similar results, in that the SIGA was found to be responsive from postadmission to predischarge with an overall mean gain of 4.5 ($SD = 1.5$). Responsiveness is a critical component for instruments that are designed to measure change over time, especially if they are to be useful in the clinical and research settings (Guyatt, Walter, & Norman, 1987). Hurn, Kneebone, and Cropley (2006) described the importance of having an assessment that is responsive to change stating, “Increasing responsibility is being placed on shoulders of practitioners to evaluate and demonstrate the effectiveness of their services.”

The correlation between the predischarge SIGA and the help time needed in the home was $r = -.41$, $p = .06$. The direction of this correlation is that the participants with lower levels of ability require higher levels of assistance from others. It is always difficult to interpret a statistical test when $p = .06$, especially when the sample size is only 21. There is a high chance of Type II error. In addition to low power because of the small sample, possible causes of a Type II error could be a) a ceiling effect in predischarge scores with a lack of variance upon which a correlation depends, and/or b) excessive optimism of predischarge participants anticipating going home.

This study found that two predischarge SIGA goals were predictive of in-home SIGA goals. Chance might explain that two of the individual goals predicted home function whereas the overall SIGA did not. On the other hand, some of the participants may have been more accurate when describing a specific occupation as opposed to overall ability.

The correlation between predischarge overall SIGA overall and postdischarge overall SIGA was not statistically significant ($r = .23$, $p = .31$). Most participants rated their abilities at
predischarge as perfect (10) or nearly perfect (9); this could have been caused by the lack of difficult occupations chosen as initial goals, resulting in successfully reaching the goals. A ceiling effect leads to a fundamental problem of predictive studies. It is important for patients in a rehabilitation setting to achieve their goals, but achieving goals may ironically cause a ceiling effect, just like the SIGA scores in this study. If a ceiling effect occurs, there will be an imperfect prediction of any index of function in the home because of the lack of variance.

A feeling of false optimism by the participants could have been another reason for the small correlation between the predischarge and postdischarge overall SIGA scores. The participants may have believed they were doing extremely well while in the skilled nursing facility. However, after discharge when encountering the actual challenges of living without skilled nursing support, participants might have gained a different perspective while rating their levels of ability. The scores of the SIGA significantly decreased from predischarge to postdischarge. Arguably, this could demonstrate that the SIGA was responsive to the changed opinions of the participants.

At predischarge, perhaps the therapist or SIGA can include instruction for avoiding false optimism. This could be accomplished by having the participants think about concrete problems that may occur in the home. The participant will be required to assess their abilities and how they feel their abilities will assist them in the home. This instruction could be completed prior to the participant rating their predischarge overall SIGA and individual goals.

The duration between the postadmission and predischarge SIGA scores was approximately four times greater than the time between predischarge and postdischarge SIGA scores. The mean days prior to collecting the postdischarge data was 5.4. Harper, Stalker, and Templeton (2006) found the COPM to be sensitive to change when comparing self-ratings for
self-care at admission to ratings at discharge and at follow-up points (3, 6, and 12 months).
However, discharge scores decreased by 1.6 at the 3 month follow-up and decreased by 1.3 at the 6 month follow-up. Though the scores decreased after discharge once the client returned home, the scores still remained higher than the admission score. The current study had similar results in that the overall SIGA score decreased after discharge, but the overall score postdischarge was still higher than the postadmission score. These two studies demonstrate that once the participants returned to their home environment, they were unable to maintain the high performance as rated at predischarge.

In their study of the COPM, Wressle et al. (1999) found that most goals identified (74%) were in the activities of daily living area. Chan and Lee (1997) also studying the COPM found that 183 of the 327 problems (56%) were self-care related. In this study, a total of 75 goals were identified at the admission evaluation by the 21 participants. Similar to the COPM studies, basic self-care goals were common, including dressing (16), walking to a particular place (10), transfers (8), toileting (8), bathing (8), standing to engage in specific occupation (3), and feeding (1). Instrumental occupations also were cited: meal preparation (13), home management (3), and driving (1). The only leisure goal involved pet care. The only productivity goal included return to paid employment. There were two miscellaneous goals that did not fit into a category (e.g., grip things better, stand up alone).

There are several implications for occupational therapy. First, similar to past research, the SIGA assisted participants in eliciting client-centered goals. It is important to include the patient in the assessment process; the SIGA can help engage the patient from the beginning of therapy and increase the patient’s involvement in the therapeutic process. The therapist can then find out what is meaningful and purposeful to the patient and include this in the treatment plan.
The SIGA was responsive to the changes made throughout the in-patient stay. This allows the therapist to identify if the interventions elicited the changes in the patient, from the patient’s point of view. However, the therapist can infer that the patient’s opinions of function may change once the patient is in the home environment. It also can be inferred that patients requiring more assistance at home will have lower scores on the SIGA when administered in the home.

There are several limitations to this study. First, there was a high refusal rate resulting in a small sample size. Residents of the skilled nursing facility may have been hesitant to participate because of a fear of a stranger coming to their homes or calling them on the telephone. Also, some of the residents were not appropriate to participate because of a decrease in cognitive function. The recruitment of the participants was the responsibility solely of the full-time occupational therapist. Another limitation was the variation of data collection; the postadmission and predischarge SIGA scores were gathered in-person, while the postdischarge SIGA scores were gathered over the telephone. Lastly, the responsiveness scores are not based on masked re-tests, unlike the scores for predictive validity.

Future research may consider recruiting a larger number of participants and/or age groups from a skilled nursing facility. Also, the plan could allow for more time between the predischarge and postdischarge SIGA score collection. Lastly, the therapist should encourage participants to identify more specific occupations causing them difficulty in their lives.

Acknowledgments

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References


Responsiveness and Predictive Validity


therapy. *Canadian Journal of Occupational Therapy*, 57, 82-87.


Table 1.

*Responsiveness of the SIGA from postadmission to predischarge.*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Postadmission</th>
<th>Predischarge</th>
<th>Gain</th>
<th>t</th>
<th>p</th>
<th>Cohen’s Effect Size&lt;sup&gt;a&lt;/sup&gt;</th>
<th>SBR Effect Size&lt;sup&gt;b&lt;/sup&gt;</th>
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<sup>a</sup>Cohen’s effect size is calculated as the change score divided by its standard deviation and then divided by the square root of the difference between 1 and the correlation between the postadmission and predischarge score (Cohen, 1988, p. 48).

<sup>b</sup>Stratford, Binkley, and Riddle (1996) recommended calculating the effect size as the change score divided by the standard deviation of the postadmission score.

<sup>c</sup>Statistics are not appropriate because of small sample.
Table 2.

Levels of predictions between predischarge SIGA and postdischarge variables, as tested by Spearman Correlation Coefficients.

<table>
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<th></th>
<th>Help Time Needed Postdischarge</th>
<th>Overall Postdischarge SIGA</th>
<th>SIGA Goal #1 Postdischarge</th>
<th>SIGA Goal #2 Postdischarge</th>
<th>SIGA Goal #3 Postdischarge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Predischarge S</td>
<td>$r = -.41$</td>
<td>$r = .23$</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SIGA (n = 21)</td>
<td>$p = .06$</td>
<td>$p = .31$</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SIGA Goal #1 Predischarge (n = 21)</td>
<td>$r = -.04$</td>
<td></td>
<td>$r = .20$</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$p = .86$</td>
<td></td>
<td>$p = .38$</td>
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</tr>
<tr>
<td>SIGA Goal #2 Predischarge (n = 21)</td>
<td>$r = -.44$</td>
<td></td>
<td></td>
<td>$r = .55$</td>
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</tr>
<tr>
<td></td>
<td>$p = .046$</td>
<td></td>
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<td>$p = .01$</td>
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<tr>
<td>SIGA Goal #3 Predischarge (n = 20)</td>
<td>$r = -.45$</td>
<td></td>
<td></td>
<td></td>
<td>$r = .51$</td>
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<tr>
<td></td>
<td>$p = .049$</td>
<td></td>
<td></td>
<td></td>
<td>$p = .02$</td>
</tr>
</tbody>
</table>

Note. SIGA Goal #4 and #5 are not pictured because of the small sample size.
Figure 1. Mean overall SIGA scores at postadmission, predischarge, and postdischarge.