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| Abstract: | Parent advocacy is important for the transition outcomes of autistic youth. However, it is unclear whether parent advocacy efforts support or stifle youths' self-determination. This study examined concurrent (n=180) and longitudinal (n=134) associations between parent advocacy and transition-aged autistic youths' self-determination (as reported by parents) and explored whether individual and family characteristics moderated this relationship. Cross-sectional results indicated a positive association between parent advocacy and self-determination for youth with higher adaptive behavior, lower externalizing behavior, and higher parent-child relationship quality. Longitudinal results demonstrated that change in parent advocacy related to change in self-determination for youth with lower adaptive behavior and higher externalizing behavior. Findings suggest that targeting parent advocacy could enhance self-determination skills in autistic youth. | | | | | |

PARENT ADVOCACY AND YOUTH SELF DETERMINATION

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The Role of Parent Advocacy in Autistic Youths' Self-Determination

Abstract

Parent advocacy is important for the transition outcomes of autistic youth. However, it is unclear whether parent advocacy efforts support or stifle youths' self-determination. This study examined concurrent (n=180) and longitudinal (n=134) associations between parent advocacy and transition-aged autistic youths' self-determination (as reported by parents) and explored whether individual and family characteristics moderated this relationship. Cross-sectional results indicated a positive association between parent advocacy and self-determination for youth with higher adaptive behavior, lower externalizing behavior, and higher parent-child relationship quality. Longitudinal results demonstrated that change in parent advocacy related to change in self-determination for youth with lower adaptive behavior and higher externalizing behavior. Findings suggest that targeting parent advocacy could enhance self-determination skills in autistic youth.

Keywords: parent advocacy; autism spectrum disorder; transition to adulthood; parent-child relationship; self-determination

The transition to adulthood is a critical time when youth begin to forge a path for themselves and attain more autonomy (Arnett, 2000). This transition is challenging for many, but particularly so for those with autism, as core autistic traits, co-occurring conditions (e.g., intellectual disability), and the loss of essential services after leaving high school can lead to difficulties in attaining post-school outcomes (Eaves & Ho, 2008; Laxman et al., 2019). Indeed, relative to their non-autistic peers, autistic transitionaged youth are less likely to live independently, secure competitive employment, and enroll in post-secondary education programs (Anderson et al., 2014; Shattuck et al., 2012); such disparities are especially concerning given that many autistic transition-aged youth aspire for (but struggle to acquire) more autonomy across these domains (Sosnowy et al., 2018). Therefore, identifying ways to support greater autonomy for autistic transition-aged youth is crucial.

Self-determination skills can enable youth to be agents of change for themselves (Shogren et al., 2017). For decades, disability policy and research have emphasized the importance of self-determination. Laws such as the Individuals with Disabilities Education Improvement Act (IDEA) protect the rights of students with disabilities to self-determination by providing opportunities for involvement in transition planning (Russo, 2019). Research has demonstrated that greater self-determination skills are linked to better employment outcomes and increased quality of life among individuals with disabilities (Lachapelle et al., 2005; Shogren et al., 2015). Self-determination may be particularly important to encourage among autistic youth, as they demonstrate lower levels of self-determination compared to their non-autistic peers, including those with other developmental disabilities (Qian et al., 2022).

Studies investigating predictors of self-determination among autistic youth have primarily focused on characteristics of the individual, such as age, gender, co-occurrence of intellectual disability, adaptive behavior, and disability severity, while contextual factors related to self-determination in autistic youth are rarely examined (Morán et al., 2021). However, contextual factors are important to consider, given theoretical frameworks such as Causal Agency Theory and Self-Determination Theory suggest supportive contexts can facilitate the development of self-determination (Ryan & Deci, 2000; Shogren et al., 2017). One such contextual factor is parent advocacy. Due to a myriad of reasons – most notably barriers to

accessing disability services and high-quality providers – families often become strong advocates for their autistic youth (Snell-Rood et al., 2020). Parental advocacy efforts are essential to getting youths' needs met, as they are highly related to increased access to services for autistic transition-aged youth (Lee et al., 2022) and facilitate employment opportunities for their youth (Petner-Arrey et al., 2016). Additionally, parent activation and involvement – related concepts to advocacy – are associated with a higher likelihood of employment and more inclusion in the general education curriculum for students with disabilities (Martinez et al., 2012; Ruble et al., 2019).

While parent advocacy plays an important role in supporting youths' outcomes during the transition to adulthood, it is unclear whether these advocacy efforts empower youth to be self-determined.

Theoretical frameworks for learning, such as Social Learning Theory (Bandura, 1971), would suggest that parent advocacy can support youth self-determination through modeling. This is consistent with assumptions in the disability field that parents serve as role models for self-determination through their advocacy (e.g., Field & Hoffman, 1999). Though not tested directly, there is some research to support this perspective. For example, Zeng et al. (2022) found that greater parent involvement in school-related activities (e.g., attending class events and participating in Individualized Education Program [IEP] meetings) was associated with greater self-determination in students with learning disabilities.

Conversely, literature on parental overinvolvement in the general population demonstrates that a high level of parent engagement can supplant youths' self-determination (Schiffrin et al., 2019). The present study adds to this body of literature by examining whether parent advocacy encourages or supplants the development of self-determination among autistic transition-aged youth.

Given the heterogeneity among autistic youth and their families, associations between parent advocacy and youth self-determination may vary based on youth and family characteristics. It may be more challenging to support the development of self-determination for autistic youth with higher support needs, such as those with lower adaptive behavior or higher externalizing behavior, as they demonstrate lower levels of self-determination, have a difficult time advocating for themselves in IEP meetings, and report higher unmet service needs (Johnson et al., 2020; J. L. Taylor & Henninger, 2015; Tomaszewski et

al., 2020). Consequently, parents may choose to involve themselves in more advocacy-related behavior on behalf of their youth with higher support needs, which could inadvertently suppress their self-determination; however, this has yet to be investigated.

The quality of the parent-child relationship may also be important to consider when examining the association between parent advocacy and youth self-determination, as self-determination can flourish when environments are supportive (Ryan & Deci, 2000). The role of the parent-child relationship in transition-aged youths' outcomes has been highlighted in the general population. For instance, a study by Lindell and colleagues (2017) found that parent-child relationship quality moderated the association between parental overinvolvement and youths' perception of the transition to adulthood three years later. Additionally, Nelson & Padilla-Walker (2013) found that higher-quality relationships between emerging adults and their parents were related to indicators of adjustment (e.g. prosocial behavior, high self-worth).

The present study

Using data from a randomized controlled trial testing the effects of a parent advocacy intervention on transition outcomes for autistic youth, we investigated the associations between parent advocacy (advocacy skills and involvement in advocacy activities) and youth self-determination (as reported by parents) in two ways. First, we took a cross-sectional approach by examining the link between parent advocacy and youth self-determination prior to the participants receiving any intervention. This allowed us to investigate if and how these constructs co-occur as autistic youth transition to adulthood. Second, we took a longitudinal approach to examine whether change in parent advocacy after parents engaged in the advocacy program was associated with change in youth self-determination over the same 12-month period. This longitudinal approach adds to the cross-sectional analyses by investigating whether intervening in parent advocacy influences youth self-determination. We examined moderators using both approaches, as individual differences in youth and family characteristics may differentially impact how parent advocacy relates to youth self-determination. Specifically, we had two research questions (RQs): (RQ1) Is there a cross-sectional association between parent advocacy (i.e., advocacy skills and involvement in advocacy activities) and autistic youths' self-determination (as reported by parents)? Do

individual (adaptive and externalizing behavior) and family (parent-child relationship quality) factors moderate this relationship? and (RQ2) Does a change in parent advocacy predict change in autistic youths' self-determination (as reported by parents)? Do individual and family factors moderate this relationship? Given the lack of prior research in this area, no specific hypotheses were made regarding the direction of associations.

Method

Participants

Participants were drawn from a multi-site randomized controlled trial ([blinded]). Eligibility criteria for the study were as follows: (1) parent or legal guardian of an autistic child aged 16–26 (all participants were parents except for two who were grandparents and also legal guardians of the autistic youth); (2) medical, psychological, or educational documentation of youths' autism diagnosis; (3) youth met a lifetime cut-off indicating autism on the Social Communication Questionnaire (Rutter et al., 2003); and (4) parents lived in one of the states where the study was conducted ([blinded]) and could attend a 12-week program at the intervention site. Recruitment was conducted through autism studies, research registries, disability agencies, school personnel, and autism support groups. Recruitment methods included targeted emails, mailed letters, phone calls, and word of mouth.

Cross-sectional analyses (RQ1) included 180 parents of autistic youth. Analyses for RQ2 included 134 parents who also had data at the 12-month follow-up (see Procedures). There were no significant differences in study variables or demographic information (youth age, race, and gender, and parent age and education) at baseline for participants included in RQ2 analyses (n = 134) versus those not included (n = 46; ps > .107). Demographics for RQ1 and RQ2 samples are presented in Table 1.

Procedures

Prior to participating in the study, written consent was obtained from all parents. Study procedures were approved by each site's university Institutional Review Board. Before receiving the intervention, baseline data were collected from parents and autistic youth through interviews, surveys, and standardized assessments either in-person at the university site or via web-conferencing due to restrictions

implemented during the COVID-19 pandemic. Once baseline data were collected, participants were randomized to the treatment or waitlist-control condition using block randomization within each site, grouped by whether the autistic youth (1) was in high school and (2) had an intellectual disability. Parents in the treatment condition then completed a 12-week advocacy program focused on the adult disability service system. For more information on the intervention, see [blinded]. Participants in the control condition received written materials on identical topics but did not have access to the explanation of materials or group-based discussion with local experts and fellow parents. While the focus of the intervention and materials pertained to navigating the adult disability service system, topics related to advocacy (e.g., developing parent advocacy skills; the importance of empowering youth to be self-advocates) were embedded in materials given to the control group and sessions given to the treatment group. Follow-up data were collected at multiple time points, each approximately six months apart. In this analysis, we focus on the data collected at baseline and approximately 12 months after the treatment group finished the program (ranging from 14 to 21 months after baseline), as these time points included measurements of parent advocacy skills, advocacy activities, and youth self-determination.

Measures

Parent advocacy

Parent advocacy skills. Parent advocacy skills were measured at baseline and the 12-month follow-up using a 10-item survey that has been used in our previous work ([blinded]), probing parents on their perceived advocacy skills using a 5-point Likert scale from 1 ("not at all") to 5 ("excellent"). For instance, participants were asked, "How able are you to effectively communicate with providers/agencies/professionals?" and "How able are you to apply your rights and knowledge of the laws in navigating the adult service system?" Overall scores were calculated by averaging all items, with a higher score indicating higher advocacy skills. Cronbach's alpha at baseline and the 12-month follow-up were .88 and .91, respectively.

Parent advocacy activities. The extent to which parents engaged in advocacy-related activities was measured at baseline and the 12-month follow-up using the Advocacy Activities Scale. The

Advocacy Activities Scale was developed from the Special Education Rights and Advocacy Scale (Burke & Hodapp, 2016) originally focused on special education rights but modified to assess advocacy activities related to the adult disability service system. The measure consists of 16 items on a 4-point Likert scale from 1 ("not at all") to 4 ("very often"). Example items include, "To what extent have you called adult service provider agencies to ask about eligibility and services?" and "To what extent have you written letters to legislators about disability services" (see [blinded] for a list of all items). Items were summed to create a total score, with higher scores indicating more engagement in activities. The Advocacy Activities Scale has demonstrated excellent internal consistency in this sample ([blinded]). Cronbach's alpha for this study was .91 at baseline and .91 at the 12-month follow-up.

Parent-reported self-determination

The Self-Determination Inventory: Parent/Teacher Report (SDI:PTR; Shogren et al., 2021) was administered at the baseline data collection visit and used to measure self-determination. The SDI:PTR consists of 21 items that probe for the youth's ability to set and attain goals and make decisions for themselves. Parents indicated their level of agreement with statements on their youth's self-determination using a sliding scale between 0 (disagreement) and 99 (agreement). An overall score was computed by averaging items, with higher scores indicating higher self-determination. Previous research on individuals with disabilities aged 13-22 has verified the SDI can be reliably used by informants (Shogren et al., 2021). The current sample, consisting of parents of youth aged 16-26, demonstrated excellent reliability of the SDI:PTR (Cronbach's alpha was .92 at baseline and .91 at the 12-month follow-up).

Adaptive behavior

The caregiver interview version of the Vineland Adaptive Behavior Scales-3 (VABS-3; Sparrow et al., 2016), a widely-used measure of adaptive behavior, was administered at baseline either in-person or via videoconferencing. The adaptive behavior composite standard score was used in the analyses, which includes information on adaptive behavior across multiple domains: communication, daily living skills, and socialization. Higher standard scores indicate better adaptive functioning. The VABS-3 has excellent internal consistency and test-retest reliability (Sparrow et al., 2016).

Externalizing behavior

The externalizing scale of the Child Behavior Checklist (CBCL; Achenbach & Rescorla, 2001) and the Adult Behavior Checklist (ABCL; Achenbach & Rescorla, 2003) was administered at the baseline visit and used as a measure of externalizing behavior. The CBCL was given to parents of youth under 18, while the ABCL was given to parents of youth 18 and older. The CBCL/ABCL are caregiver-report surveys where parents are asked to rate their youth's emotional and behavioral functioning. The externalizing scale consists of the rule-breaking behavior, attention problems, and aggressive behavior subscales. T-scores were used in the analysis, which can be combined across forms. Both forms demonstrate strong psychometric properties (Achenbach & Rescorla, 2003, 2001).

Parent-child relationship quality

The Positive Affect Index (PAI; Bengtson & Schrader, 1982), a 10-item parent-report survey, was measured at baseline and used to assess the parent-child relationship. The PAI asks parents to assess their feelings of trust, affection, understanding, fairness, and respect toward their child and how the parent perceives their child may feel towards them using a 6-point Likert scale (1= "not at all" to 6 = "extremely"). Items were summed to compute a total score. The PAI has established construct and discriminant validity and strong reliability (Bengtson & Schrader, 1982).

Data analysis

To test the concurrent association between parent advocacy and youth self-determination and whether individual and family functioning moderated this relationship (RQ1), three models were run with parent advocacy skills as a predictor of youth self-determination, and three models were run with parent advocacy activities as a predictor of youth self-determination. Each model contained a parent advocacy term, the moderator variable (adaptive behavior, externalizing behavior, or parent-child relationship quality), and a moderator-by-parent advocacy term while controlling for other moderator variables.

To assess whether change in parent advocacy predicted change in youth self-determination (RQ2), change scores for parent advocacy skills, parent advocacy activities, and youth self-determination were created by subtracting scores at baseline from 12-month follow-up scores. Given differences across

participants in the amount of time that elapsed from baseline to the 12-month follow-up, elapsed time between the two visits was controlled for in all RQ2 models. The same procedure as the cross-sectional analysis was used for the longitudinal analysis with the exception that baseline self-determination and parent advocacy values were included as independent variables to ensure any significant findings related to change were not influenced by initial levels of these variables.

To preserve power for the moderation analyses, control variables were included in the model if they were correlated with the dependent variables (baseline self-determination [RQ1], change in self-determination [RQ2]). A number of variables were probed (youth age, youth gender, parent education, and study condition [treatment vs control group]); none were associated with the outcome variables and, therefore, were not included in the final models. For all models, independent variables were mean-centered. Model diagnostics were examined using residual plots, and no assumptions were violated. Partial eta squared (η_p^2) effect sizes are reported for all models, with .01 indicating a small effect, .06 indicating a medium effect, and .14 indicating a large effect (Cohen, 1988).

Results

Cross-sectional relations between parent advocacy and youth self-determination (RQ1)

Parent advocacy skills. Estimated effects for models that tested the main effect of parent advocacy skills and its interaction with individual and family moderators on youth self-determination are presented in Table 2. Statistically significant interactions for RQ1 are plotted in Figure 1. The main effect of parent advocacy skills was not significant across any models. Adaptive behavior moderated the relationship between parent advocacy skills and youth self-determination. A simple slopes analysis revealed that for those with adaptive behavior one standard deviation (SD) above the mean, there was a positive relationship between parent advocacy skills and youth self-determination (β =4.58, t[174]=2.12, p=.035); no significant relationship was detected for those with adaptive behavior at or below the mean (ps>.392; see Figure 1a). Externalizing behavior also moderated the relationship between parent advocacy skills and youth self-determination. Follow-up analyses demonstrated a positive relationship between parent advocacy skills and youth self-determination for those with externalizing behavior one SD below

the mean (β =4.94, t[174]=2.44, p=.016); there was no relationship for those with externalizing behavior at or above the mean (ps>.217; see Figure 1b). Finally, parent-child relationship quality moderated the association between parent advocacy skills and youth self-determination; for those with parent-child relationship quality one SD above the mean, there was a positive relationship between parent advocacy skills and youth self-determination (β =4.19, t[174]=2.04, p=.042). There was no relationship between parent advocacy skills and youth self-determination for those with parent-child relationship quality at or below the mean (ps>.359; see Figure 1c). In sum, there was a positive association between parent advocacy skills and youth self-determination for youth with higher adaptive behavior, lower externalizing behavior, or a more positive parent-child relationship, such that parents who reported more advocacy skills tended to have youth with lower self-determination skills and parents who reported less advocacy skills tended to have youth with lower self-determination skills.

Parent advocacy activities. Estimated effects for models that tested the main effect of parent advocacy activities and its interaction with individual and family moderators on youth self-determination are presented in Table 3. The main effect of parent advocacy activities was not significant across any models. Parent-child relationship quality moderated the relationship between parent advocacy activities and youth self-determination, depicted in Figure 1. For those with lower parent-child relationship quality (one SD below the mean), there was a negative relationship between parent advocacy activities and youth self-determination, such that parents who engaged in more advocacy activities tended to have youth with lower self-determination skills and parents who engaged in fewer advocacy activities tended to have youth with greater self-determination skills (β =-0.43, t[174]=-2.27, p=.024). No relationship was found for those with parent-child relationship quality at or above the mean (ps>.208; see Figure 1d). Neither adaptive behavior nor externalizing behavior were significant moderators of the association between parent advocacy activities and youth self-determination.

Longitudinal relation between parent advocacy and youth self-determination (RQ2)

Parent advocacy skills. Table 4 presents estimated effects for models that tested the main effect of change in parent advocacy skills and its interaction with individual and family moderators on change in

youth self-determination. Significant interactions for RQ2 are plotted in Figure 2. There was no main effect of change in parent advocacy skills on change in self-determination across any models. The interaction between adaptive behavior and change in advocacy skills was significant, and a simple slopes analysis demonstrated that for those with adaptive behavior one SD below the mean, there was a positive relationship between change in parent advocacy skills and change in youth self-determination (β =6.26, t[125]=2.79, p=.006). Put another way, for youth with lower adaptive behavior, parents who exhibited an increase in advocacy skills tended to report youth increased in self-determination, and parents who demonstrated a decrease in advocacy skills tended to have youth who demonstrated a decrease in self-determination skills. No relationship was detected for those with adaptive behavior at or above the mean (ps>.073; see Figure 2a). Externalizing behavior and parent-child relationship quality were not significant moderators of the association between change in advocacy skills and change in youth self-determination.

Parent advocacy activities. Table 5 presents estimated effects for models that tested the main effect of change in parent advocacy activities and its interaction with individual and family moderators on change in youth self-determination. There was no main effect of change in parent advocacy activities on change in youth self-determination across any models. Externalizing behavior significantly moderated the relationship between change in parent advocacy activities and change in youth self-determination, such that for those with externalizing behavior one SD above the mean, there was a positive relationship between change in parent advocacy activities and change in youth self-determination (β =0.60, t[125]=2.63, p=.010); no relationship was found for those with externalizing behavior at or below the mean (ps>.063; see Figure 2b). Therefore, parents who exhibited an increase in advocacy activities tended to have youth who increased in self-determination, and parents who demonstrated a decrease in advocacy activities tended to report their youth decreased in self-determination skills if the youth had higher externalizing behavior. Adaptive behavior and parent-child relationship quality were not significant moderators of the association between change in parent advocacy activities and youth self-determination.

Discussion

Investigating the ways in which parents support the development of self-determination in youth with disabilities, particularly for those with autism, is an underdeveloped area of research (Dean et al., 2021). Given the challenges associated with the transition to adulthood, parents often take active roles in advocating for their autistic youth. These efforts have been shown to improve transition outcomes, such as increased access to essential services and a higher likelihood of employment (Lee et al., 2022; Ruble et al., 2019). However, it has remained unclear whether parent advocacy supports or stifles self-determination in autistic youth, a worry expressed by parents themselves (W. D. Taylor et al., 2019). Therefore, the present study examined the role of parent advocacy on parent-reported self-determination of their autistic youth cross-sectionally and longitudinally; we identified complex relationships with youth functioning level and parent-child relationship quality modifying these associations.

Parent advocacy is related to autistic youths' self-determination for those with lower support needs and high-quality parent-child relationships

Cross-sectional study results indicated that parents with higher levels of advocacy tended to report higher levels of self-determination for their youth, if the youth had lower support needs (i.e., higher adaptive behavior or lower externalizing behavior). The alternative was also true across these contexts; parents who demonstrated lower levels of parent advocacy reported that their youth had lower levels of self-determination. While it has been speculated that youth may naturally gain self-determination skills based on modeled behaviors from parents (Field & Hoffman, 1999), our cross-sectional study is the first (to our knowledge) to directly investigate this idea, finding support for this association—at least for youth with lower support needs. No association between parent advocacy and youth self-determination was found for youth with higher support needs. It could be that autistic youth with lower adaptive behavior and higher externalizing behavior benefit less in their development of self-determination through observing their parent's engagement in advocacy due to difficulties with attention (Hendry et al., 2020; Morris et al., 2014), a core principle of observational learning (Bandura, 1971).

We also found that self-determination and parent advocacy were positively related for those with a higher quality parent-child relationship. However, for dyads that reported lower relationship quality, these

constructs were negatively associated, such that greater parent advocacy was related to lower levels of self-determination. The quality of the parent-child relationship has been documented as a salient moderator in research focused on parenting styles and youth outcomes in the general population (Lindell et al., 2017; Nelson & Padilla-Walker, 2013). Our results complement these findings, suggesting that parent advocacy may encourage self-determination in the context of positive parent-child relationships but may thwart self-determination in the context of lower-quality parent-child relationships.

Change in parent advocacy is related to change in autistic youths' self-determination for those with higher support needs

Results from the longitudinal analyses followed similar patterns as the cross-sectional findings, but associations were relevant for a different subgroup of autistic youth, demonstrating that a change in parent advocacy corresponded to a change in self-determination for youth with higher support needs (i.e., lower adaptive behavior or higher externalizing behavior). The cross-sectional data suggest that modeled behaviors occurring naturalistically may not contribute as strongly to the development of selfdetermination in those with higher support needs; however, these autistic youth do seem to respond to more intentional changes in parent advocacy and may benefit the most (in terms of self-determination) from a parent advocacy intervention. A number of existing studies have demonstrated that interventions directly targeting self-determination are effective in increasing self-determination skills (e.g., Shogren et al., 2019). Our study provides preliminary evidence that targeting parent advocacy through intervention may also promote greater self-determination for autistic youth who arguably need it the most—those with higher support needs. The sample in this analysis included participants who received advocacy training across different mediums (in-person and printed materials); therefore, we are limited by a lack of a true control group to verify intervention effects. However, these results are promising and indicate that one intervention approach could help equip families with multiple skills (parent advocacy and youth selfdetermination) necessary for a successful transition to adulthood.

Study implications and directions for future research

While there were some unique relationships across aspects of parent advocacy (advocacy skills versus engagement in advocacy activities), overall patterns demonstrate that parental advocacy efforts may be an avenue through which autistic youth can develop self-determination skills. This has important implications for parents of autistic youth, as they report feelings of uncertainty about the appropriate level of involvement to support their youth's independence as they transition to adulthood (W. D. Taylor et al., 2019). Our study suggests that under most circumstances, greater parent involvement through advocacy will not undermine autistic youths' personal agency. However, when parents and their youth feel less connected to one another, parent advocacy may indeed supplant youths' self-determination.

Prior to the current study, aspects of parent- and self-advocacy had rarely been examined within the same sample. It is important to investigate these constructs together during the transition to adulthood, as this period involves a recentering of the parent-child relationship, with relinquishment of some parental control to aid in greater autonomy for their youth (Tanner, 2006). Engaging in advocacy efforts as a family is an important aspect of person-family interdependent planning, which supports the notion that the transition of youth with disabilities influences and is influenced by the family system (Kim & Turnbull, 2004). Our findings highlight this interdependent nature of the development of self-determination and suggest that parent advocacy can be one way to support youth during the transition to adulthood without stifling their autonomy. More broadly, given the findings of the current study, as well as the body of work identifying the importance of parenting on youth outcomes in the general population (e.g., Lindell et al., 2017; Nelson & Padilla-Walker, 2013; Schiffrin et al., 2019), future research focused on supporting autistic transition-aged youth should consider incorporating or accounting for the role of parents. Moreover, parent advocacy is simply one construct related to parental support, and thus, the examination of other factors, such as parenting profiles, as they relate to the development of self-determination in transition-aged autistic youth may be a fruitful area of future research.

Study limitations

This study is not without its limitations. First, the generalizability of these results is limited by the lack of racial and ethnic diversity, which is important to consider, given that families from culturally

diverse backgrounds may experience unique barriers to advocacy (Burke et al., 2016). Secondly, although we collected information on self-determination from youth, a large subsample was unable to fill out the survey due to significant cognitive and communication impairments. To ensure that all participants were included in the analyses, we used parent-report data. However, given parents were the sole reporters across all measures, there is a possibility of common method bias that may have inflated associations. Moreover, self-determination skills have been shown to differ by reporter type (Shogren et al., 2021; Tomaszewski et al., 2020); thus, future work should consider alternative ways to gather self-report information from those with more severe cognitive and communication impairments. While previous research has demonstrated differences in parenting profiles of mothers and fathers in relation to emerging adults' self-determination (Schiffrin et al., 2019), the parents in this study were mostly mothers (91%); therefore, we could not tease apart potential differences based on parent gender. It is also important to note that parents in the study were interested in participating in an intervention study aimed to improve advocacy ability, potentially biasing our study sample. For instance, participants may have come in more motivated to increase in their advocacy compared to a more representative sample of parents. Finally, our study only focused on one particular developmental period—the transition to adulthood; this could be a particularly important period to focus on parent advocacy and self-determination, given the need for advocacy during this time (Laxman et al., 2019). However, parent advocacy begins early in development, typically when their child receives a diagnosis, and continues across their child's lifespan (Burke et al., 2016); thus, work probing this relationship across time is needed to verify whether the transition to adulthood is a sensitive period for the co-development of parent and youth advocacy skills.

Conclusions

The findings of the present study demonstrate that parents who actively support their autistic transition-aged youth through advocacy can simultaneously promote their self-determination; this seems to occur naturalistically for youth with lower support needs, but changes in parent advocacy through targeted intervention may improve self-determination for autistic youth with higher support needs.

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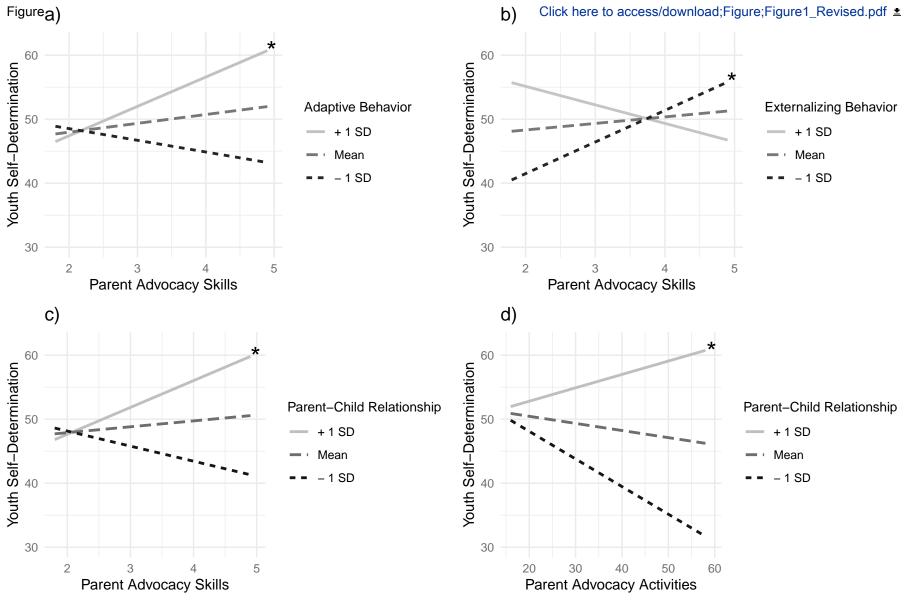
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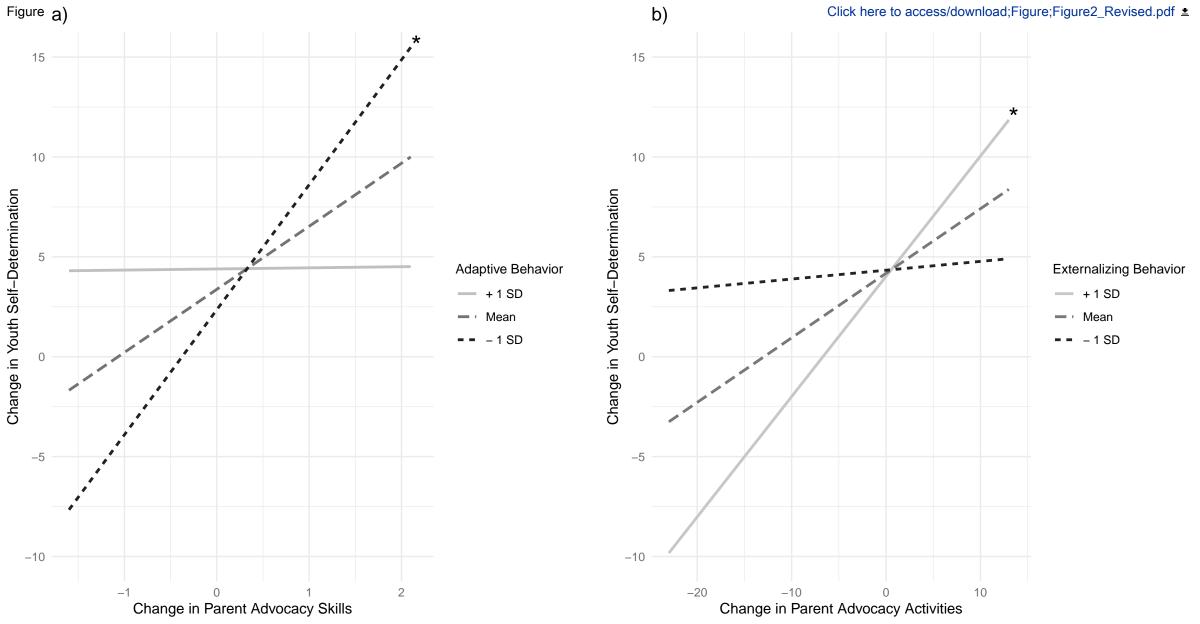


Figure 1

Individual and Family Factors Moderating the Effect of Parent Advocacy on Youth Self-Determination

Note. SD = standard deviation. Each panel of the figure depicts estimates for a model in which we detected a significant moderation effect. Lines depict simple slopes at 1 SD below the sample mean, at the sample mean, and 1 SD above the sample mean of the moderator. Statistically significant simple slopes are notated with an asterisk.

*p<.05

Figure 2

Individual and Family Factors Moderating the Effect of Change in Parent Advocacy on Change in Youth Self-Determination

Note. SD = standard deviation. Each panel of the figure depicts estimates for a model in which we detected a significant moderation effect. Lines depict simple slopes at 1 SD below the sample mean, at the sample mean, and 1 SD above the sample mean of the moderator. Statistically significant simple slopes are notated with an asterisk.

*p<.05

Table 1. Demographic Characteristics

| | Baseline (RQ1) | 12 Month Follow-Up |
|--|----------------|--------------------|
| | n=180 | (RQ2) |
| | | n=134 |
| Youth IQ ^a M (SD) | 85.85 (22.72) | 86.29 (22.62) |
| Youth with Intellectual Disability % (n) | 41% (73) | 37% (49) |
| Youth Adaptive Behavior M (SD) | 51.49 (20.91) | 52.67 (21.33) |
| Youth Age $M(SD)$ | 19.56 (2.73) | 19.57 (2.68) |
| Youth Race % (n) | | |
| Asian | 6% (10) | 7% (9) |
| Black | 7% (13) | 7% (9) |
| White | 74% (134) | 72% (97) |
| More than one race | 10% (18) | 11% (15) |
| Other | 3% (5) | 3% (4) |
| Youth Gender $\%$ (n) | | |
| Male | 75% (136) | 73% (98) |
| Female | 23% (42) | 25% (34) |
| Non-binary | 1% (1) | 1% (1) |
| Prefer not to Respond | 1% (1) | 1% (1) |
| Parent Age $M(SD)$ | 51.06 (6.35) | 51.19 (6.66) |
| Parent Education % (n) | ` , | ` , |
| High school or less | 4% (8) | 3% (4) |
| Some college | 16% (28) | 16% (21) |
| College degree | 49% (88) | 45% (60) |
| Graduate degree | 31% (56) | 36% (49) |

Note. IQ scores were missing for 24% (n = 44) of the RQ1 sample and 14% (n = 19) of the RQ2 sample.

^aMeasured using the full-scale IQ score from two subtests (Vocabulary and Matrix Reasoning) of the WASI-II (Weschler, 2011).

Table 2. Cross-Sectional Model Results Testing the Effects of Parent Advocacy on Youth Self-Determination

| | Moderator: Adaptive Behavior | | | | Mod | Externalizing | Behavior | Moderator: Parent-Child Relationship | | | | |
|-------------------------------|------------------------------|------|----------|------------|---------|---------------|----------|--------------------------------------|------------------|------|----------|------------|
| | β | SE | t | η_p^2 | β | SE | t | η_p^2 | \overline{eta} | SE | t | η_p^2 |
| Advocacy Skills | | | | | | | | | | | | |
| Intercept | 50.13 | 1.03 | 48.56*** | | 49.92 | 1.01 | 49.34*** | | 49.34 | 1.04 | 47.28*** | |
| Advocacy skills | 1.37 | 1.61 | 0.85 | .00 | 1.01 | 1.61 | 0.63 | .00 | 0.93 | 1.64 | 0.57 | .00 |
| Adaptive behavior | 0.21 | 0.05 | 4.11*** | .09 | 0.22 | 0.05 | 4.40*** | .10 | 0.22 | 0.05 | 4.29*** | .10 |
| Externalizing behavior | 0.05 | 0.14 | 0.35 | .00 | 0.09 | 0.14 | 0.64 | .00 | 0.05 | 0.14 | 0.35 | .00 |
| Parent-child relationship | 0.71 | 0.16 | 4.51*** | .10 | 0.73 | 0.16 | 4.65*** | .11 | 0.68 | 0.16 | 4.32*** | .10 |
| Advocacy skills*Moderator | 0.15 | 0.08 | 2.04* | .02 | -0.48 | 0.18 | -2.65** | .04 | 0.46 | 0.23 | 2.00* | .02 |
| Advocacy Activities | | | | | | | | | | | | |
| Intercept | 49.89 | 1.03 | 48.26*** | | 50.01 | 1.03 | 48.51*** | | 49.38 | 1.03 | 48.13*** | |
| Advocacy activities | -0.07 | 0.13 | -0.55 | .00 | -0.08 | 0.13 | -0.65 | .00 | -0.11 | 0.13 | -0.86 | .00 |
| Adaptive behavior | 0.20 | 0.05 | 3.78*** | .08 | 0.22 | 0.05 | 4.23*** | .09 | 0.22 | 0.05 | 4.23*** | .09 |
| Externalizing behavior | 0.07 | 0.14 | 0.47 | .00 | 0.09 | 0.14 | 0.61 | .00 | 0.04 | 0.14 | 0.28 | .00 |
| Parent-child relationship | 0.75 | 0.16 | 4.74*** | .11 | 0.80 | 0.16 | 4.99*** | .13 | 0.77 | 0.16 | 4.94*** | .12 |
| Advocacy activities*Moderator | 0.01 | 0.00 | 1.12 | .01 | -0.03 | 0.02 | -1.81 | .02 | 0.05 | 0.02 | 2.57* | .04 |

^{*}*p* < .05, ***p* < .01, ****p* < .001

Table 3. Longitudinal Model Results Testing the Effects of Change in Parent Advocacy on Change in Youth Self-Determination

| | Moderator: Adaptive Behavior | | | | Mode | xternalizing | Behavior | Moderator: Parent-Child Relationship | | | | |
|---|------------------------------|------|----------|------------|---------|--------------|----------|--------------------------------------|-------|------|----------|------------|
| | ß | SE | t | η_p^2 | β | SE | t | η_p^2 | β | SE | t | η_p^2 |
| Advocacy Skills | | | | | | | | | | | | |
| Intercept | 3.91 | 0.91 | 4.28*** | | 3.59 | 0.92 | 3.91*** | | 3.78 | 0.93 | 4.05*** | |
| Change in parent advocacy skills | 3.34 | 1.74 | 1.91 | .03 | 3.29 | 1.75 | 1.88 | .03 | 3.18 | 1.80 | 1.77 | .02 |
| Baseline parent advocacy skills | 1.89 | 1.62 | 1.17 | .01 | 1.65 | 1.63 | 1.02 | .01 | 1.75 | 1.65 | 1.06 | .01 |
| Baseline youth self-determination | -0.44 | 0.07 | -6.40*** | .25 | -0.44 | 0.07 | -6.30*** | .24 | -0.41 | 0.07 | -5.95*** | .22 |
| Adaptive behavior | 0.02 | 0.05 | 0.42 | .00 | 0.01 | 0.05 | 0.26 | .00 | 0.01 | 0.05 | 0.11 | .00 |
| Externalizing behavior | -0.10 | 0.13 | -0.77 | .00 | -0.10 | 0.13 | -0.81 | .01 | -0.12 | 0.13 | -0.94 | .01 |
| Parent-child relationship | -0.00 | 0.15 | -0.02 | .00 | -0.02 | 0.15 | -0.13 | .00 | -0.03 | 0.15 | -0.22 | .00 |
| Months between baseline and 12-mo visit | -0.66 | 0.61 | -1.10 | .01 | -0.81 | 0.60 | -1.34 | .01 | -0.91 | 0.61 | -1.50 | .02 |
| Change in advocacy skills*Moderator | -0.15 | 0.07 | -2.10* | .03 | 0.27 | 0.16 | 1.76 | .02 | 0.07 | 0.20 | 0.34 | .00 |
| Advocacy Activities | | | | | | | | | | | | |
| Intercept | 3.65 | 0.92 | 3.95*** | | 3.79 | 0.91 | 4.16*** | | 3.78 | 0.93 | 4.08*** | |
| Change in parent advocacy activities | 0.25 | 0.18 | 1.43 | .02 | 0.34 | 0.17 | 1.97 | .03 | 0.25 | 0.19 | 1.30 | .01 |
| Baseline parent advocacy activities | 0.03 | 0.13 | 0.23 | .00 | 0.04 | 0.12 | 0.34 | .00 | 0.08 | 0.12 | 0.69 | .00 |
| Baseline youth self-determination | -0.40 | 0.07 | -6.01*** | .22 | -0.44 | 0.07 | -6.33*** | .24 | -0.39 | 0.07 | -5.77*** | .21 |
| Adaptive behavior | 0.01 | 0.05 | 0.26 | .00 | 0.03 | 0.05 | 0.52 | .00 | 0.02 | 0.05 | 0.35 | .00 |
| Externalizing behavior | -0.07 | 0.13 | -0.53 | .00 | -0.06 | 0.13 | -0.46 | .00 | -0.09 | 0.13 | -0.74 | .00 |
| Parent-child relationship | -0.04 | 0.15 | -0.24 | .00 | -0.03 | 0.15 | -0.24 | .00 | -0.04 | 0.15 | -0.30 | .00 |
| Months between baseline and 12-mo visit | -0.78 | 0.59 | -1.32 | .01 | -0.86 | 0.58 | -1.47 | .02 | -0.90 | 0.59 | -1.52 | .02 |
| Change in advocacy activities*Moderator | -0.01 | 0.01 | -1.43 | .02 | 0.04 | 0.02 | 2.05* | .03 | 0.02 | 0.03 | 0.58 | .00 |

^{*}*p* < .05, ***p* < .01, ****p* < .001